Financial instruments, and the risk related to trading in financial instruments

(1. November 2007)
1) General information about risk related to financial instruments

Trading in financial instruments, such as shares, primary capital certificates, bonds, certificates, and financial derivative instruments or other rights and liabilities that are suitable for trading in the securities market, normally takes place in an organised manner in a trading system. By trading system\(^1\) is meant a regulated market, a multilateral trading facility (MTF)\(^2\), systematic internalisers (SI)\(^3\), market makers\(^4\) or other liquidity guarantors.

Trading takes place through the securities firms that use the trading system. As the customer, you must normally contact such a securities firm in order to purchase or sell financial instruments. There are also securities firms that transmit orders to another securities firm that itself uses the trading system. Trading may also take place internally in a securities firm, for example through the firm acting as counterparty on the trade, or by trading with another of the firm’s customers (internal trade/agency cross.).

On a regulated market\(^5\) (including stock exchanges) various types of financial instruments are traded. On the Oslo Stock Exchange shares, primary capital certificates, bonds, certificates, certain fund units and a number of different financial derivative instruments are traded. Detailed information with regard to where and how these instruments are traded is set out below.

Price information on the financial instruments that are traded on the regulated market is published regularly via its website, in newspapers or through other media.

Financial instruments, i.e. shares, primary capital certificates, bonds, fund units, or other rights and liabilities that are suitable for trading on a security market normally give a return in the form of dividends (shares) or interest (interest-bearing instruments). In addition, the price of the instrument may increase or be reduced in relation to the price at the time the investment was made. In the description below, the word investing is also used with regard to any negative positions in the instrument (short positions). The total return is the sum of dividends/interest and the price change on the instrument.

Naturally an investor looks for a total return that is positive, i.e. which is a profit. But there is also a risk that the total return is negative, i.e. there is a loss on the investment. The risk of loss varies between different instruments. Normally the chance of a gain on an investment in a financial instrument is connected to the risk of a loss. Furthermore, the longer time perspective one has for the investment, the greater the chance of a gain or loss. In an investment context, the word risk is often used as an expression both for the risk of loss and the possibility of gain. In the description below, however, the word risk is only used to describe the risk of loss. Various ways of investing in financial instruments exist in order to reduce the risk. Normally it is better to invest in several different financial instruments than a single or a few financial instruments. These instruments should have characteristics that involve a spread of risk and not aggregate risk that could arise simultaneously. When trading foreign financial instruments there is also a currency risk.

Investments in financial instruments involve economic risk, which will be further described. The customer is responsible for this risk and must therefore be familiar

\(^1\) Securities Regulations § 10-25 (2)
\(^2\) Securities Trading Act § 2-3 (4) – There are no MTFs in Norway today
\(^3\) Securities Trading Act § 2-4 (4) – There are no SIs in Norway today
\(^4\) Securities Trading Act § 2-4 (4) – Several securities firms act as liquidity guarantors for selected companies.
with the terms that apply to trading in such instruments and the instruments’
characteristics. The customer must also continuously monitor his investments in such
instruments. This applies even if the customer has obtained individual advice in
connection with the investment. Information for use when monitoring prices and
thus the development in value of one’s investments can be obtained from price lists
that are published through the mass media, such as, for example, newspapers, the
Internet, text-TV and, in some cases, from the securities firm itself. If necessary, the
customer should react rapidly in his own interests, for example to dispose of
investments that develop negatively or to provide further security for investments
that are financed by borrowing and where the security value is reduced.

There are many different types of risk and other factors of which the customer
should be aware in connection with the risk assessment that an investor should make
on investments and trading in financial instruments, and subsequently make on an
ongoing basis during the investment period.

Some of the most important types of risk are set out below:

- **Market risk** – the risk that the market as a whole, or certain parts of the
  market, where the customer has made his investment, declines or drops (for
  example, the Norwegian stock market).
- **Credit risk** – the risk of a decline in the payment capacity of an issuer or
  counterparty.
- **Price volatility risk** – the risk that substantial fluctuations in the price of a
  financial instrument affect the investment negatively.
- **Price risk** – the risk that the price of a financial instrument declines or drops.
- **Tax risk** – the risk that tax rules and/or tax rates are unclear or changed.
- **Currency risk** – the risk that a foreign currency to which the investment is
  related is reduced in value (for example, certain fund units in a mutual fund
  that is invested in American securities listed in USD).
- **Gearing effect risk** – the construction of a derivative instrument that means
  that there is a risk that the price development on the underlying asset has a
  greater negative impact on the value of the investment in the derivative
  instrument.
- **Legal risk** – the risk that relevant laws and rules are unclear or are changed.
- **Company-specific risk** – the risk that a company performs more poorly than
  expected or that the company is hit by a negative event, so that the financial
  instruments that are related to the company thereby may fall in value.
- **Sector-specific risk** – the risk that a specific sector performs more poorly than
  expected or is hit by a negative event, so that the financial instruments that are
  related to companies in the relevant sector may fall in value.
- **Liquidity risk** – the risk that the customer cannot sell a financial instrument at a
  time the customer wishes because turnover and buying interest in the financial
  instrument is low.
- **Interest risk** – the risk that the financial instrument in which the customer
  invests is reduced in value due to changes in market interest rates.
2) Shares and share-related instruments

a) General information about shares

i) Shares and limited companies

Shares in a limited company give the owner property rights to a portion of the company. If the company runs at a profit, the company normally pays a dividend on the shares. The shares also give voting rights at the general meeting, which is the highest governing body in the company. The more shares the shareholder has, the greater proportion of the capital, dividend and votes he has. Voting rights may vary depending on which categories of shares are held. There are two types of company, public limited companies (ASA) and limited companies (AS). Only shares issued by public limited companies or equivalent foreign companies can be listed on a Norwegian exchange. Particular requirements are imposed as to the company’s size, its business history, the spread of ownership, as well as publication of the company’s financial and business reports.

ii) The share price

The price of a share is affected largely by the company’s future prospects. A share price may go up or down depending on people’s analyses and assessments of the company’s future wealth creation and valuation. The future external development of the economy, technology, legislation, competition, etc., determines what demand there will be for the company’s products or services and therefore is also of fundamental importance to the development in the price of the company’s shares.

The general level of interest rates (market interest rates) also plays a decisive role in price development. If market interest rates rise, interest-bearing financial instruments that are issued at the same time can give a better return. Normally the prices of listed shares and already existing interest-bearing instruments fall. The reason is that the increasing return on newly-issued interest-bearing instruments can in relative terms give a better return than shares and existing interest-bearing instruments. Furthermore, share prices can be negatively affected by the fact that interest on the company’s debt increases, because this reduces future opportunities for profit for the company.

Other factors directly related to the company, e.g. changes in the company’s management and organisation, production breakdowns, etc., may also affect the company’s future ability to make profits, both in the short and long term. Companies may in the worst case perform so poorly that they must be declared bankrupt. In case of bankruptcy, the share capital, i.e. the shareholders’ invested capital, is normally not repaid to the investors until the company’s other debt is fully repaid. This often results in all the shares in the company become valueless.

Prices on major foreign exchanges and other marketplaces also affect prices on the stock exchange in Norway due, among other things, to the fact that several Norwegian companies are also listed on foreign marketplaces and that price equalisation (arbitrage) takes place between the marketplaces. The prices of shares in companies that belong to the same sector are often affected by changes in the price of other companies within the same sector. This impact may also apply to companies in different countries.

Participants in the finance market often have different views on how share prices will develop. These factors, which also include how the company will be
valued, contribute to there being both purchasers and sellers. If investors have the same view as to price development, they will either buy, and thereby buying pressure from many purchasers will arise, or they will sell leading to sales pressure from many sellers. In the case of buying pressure the price rises, and in the case of selling pressure it falls.

Turnover, i.e. how much is bought or sold of a specific share, affects the share price. In the case of high turnover, the difference, also called the “spread”, between the price that purchasers are willing to pay (the purchase price) and the price sellers require (the sale price) is reduced. A share with high turnover, where large amounts can be traded without a significant impact on the price, is said to have good liquidity and is easy to buy and sell.

The operating parameters for businesses, both nationally and internationally, can also affect shares prices. Changes in tax and duty levels nationally and in other countries affect the companies’ cost levels and thus their competitive situation. International agreements between countries on tolls and duties on the import and export of goods and services affect the competitive situation between companies and thereby share prices. Violent events, such as catastrophes, terrorist action and war, may also have a significant impact on share prices on exchanges throughout the world.

The prices at which shares are traded, such as “highest” “lowest” and “last”, as well as information on traded volume, is published, among other places, in most major daily newspapers, on text-TV and various Internet pages that are operated by marketplaces, securities firms and media companies. The timeliness of this price information may vary depending on the manner in which it is published.

iii) Different marketplaces

In Norway there are today two regulated markets for trading in shares: Oslo Stock Exchange and Oslo Axess. Only the Oslo Stock Exchange has a licence as an exchange (www.oslobors.no). Oslo Axess (www.osloaxess.no) is mainly subject to the same rules as apply to the Oslo Stock Exchange with regard to monitoring, supervision and sanctions in the event of a breach of the regulations that apply to trading on regulated markets. Trading in Norwegian shares may also take place on regulated markets abroad, where several Norwegian companies are listed.

Trading in shares that are not listed on a regulated market, takes place in the so-called OTC market. In this market trades take place based on information as to prices and interest that broking firms give to each other. The most widely used method is that the broking firm posts indications of purchase or sale interest in a trading support system that is operated by Norwegian Stockbrokers Information Services (FINFO). The NOTC list is divided into an A list and a B list. Only companies that are registered on the A list are obliged to publish price-relevant information of a material nature to the market. For more information on the NOTC list, see www.nfmf.no.

Trading on a regulated market or in another trading system constitutes the secondary market for shares, primary capital certificates and bonds that a company has already issued. In addition, the NOTC list functions as a secondary market for shares. If the secondary market functions well, i.e. it is easy to find buyers and sellers and offer prices from buyers and sellers are continuously listed, as well as the prices on executed trades, companies have
an advantage in that it is easier to issue new shares and thereby raise more capital for the company’s business.

Shares registered on a regulated market or in another trading system are normally divided into different lists dependent on the company’s market value or (the degree of) liquidity in the company’s shares. These lists are published normally on the trading system’s website, in newspapers and through other media. The companies that are listed on the Oslo Stock Exchange are divided into four different segments dependent on the company’s liquidity: respectively, OBX, OB Match, OB Standard and OB Nye. In addition, there are shares listed on Oslo Axess - a regulated market for companies that do not fulfil the strict requirements imposed on exchange listed companies with regard to size and lifetime, etc. Various shares may during the day or over longer periods show differing price stability (volatility), i.e. the frequency and size of price changes. Shares on lists with high liquidity are normally regarded as involving lower risk than shares listed on lists with lower liquidity.

iv) Different share classes

Shares may be found in different classes, normally A and B shares. There are only a few Norwegian listed companies that have different share classes. A shares give one vote, while B shares normally give limited or no voting rights. The difference in voting rights may, for example, be due to the fact that when ownership has been spread, the original founders’ and shareholders’ influence over the company has been protected by giving them greater voting rights.

v) Par value and split and merger of shares

A share’s par value is the value that the share represents of the company’s share capital. The sum of all the shares in a company multiplied by the par value of each share represents the company’s share capital. Among other things, a company may change the par value, i.e. because the market price of the share has risen considerably. By dividing up each share into two or more shares, a so-called split, the par value is reduced and at the same time the price of the shares is reduced. The shareholder’s capital, however, is unchanged after a split, but is divided into more shares that each has a lower par value and a lower price. The opposite may be a merger (reversed split) that is carried out, for example, if the price falls considerably. In this case, two or more shares are joined together to form one share. The shareholder, however, has the same capital after a merger, but divided between fewer shares and with a higher par value and a higher price per share.

vi) Stock exchange introductions, privatisations and acquisitions

A stock exchange introduction (Initial Public Offering or IPO) involves a company’s shares being introduced to the stock market, i.e. being listed on a stock exchange. In connection with IPOs, the general public may often be invited to subscribe for shares in the company to increase the number of shareholders, and consequently improve trading in the company’s shares. Where a state-owned company is introduced to the exchange, this is called privatisation or part-privatisation depending on how large a proportion of the company the state is selling to the public.

Acquisitions take place as a rule through one or more investors inviting the shareholders in a company to sell their shares on certain terms. If the purchaser obtains 90% or more of the share capital and votes in the company, the purchaser may acquire compulsorily the remaining shares from the shareholders who have not accepted the purchase offer.
An obligation to make an offer arises as a result of one (or several investors who are co-operating) purchasing so many shares that they pass 1/3 of the votes in a Norwegian company which is listed on a Norwegian regulated market\(^5\). In such cases, the purchaser(s) is obliged to make an unconditional offer to all remaining shareholders whereby the purchaser(s) will purchase the remaining shares at a price which is no lower than the highest consideration paid by the purchaser(s) in the 6 previous months.

vii) Issues

If a limited company wishes to expand its business, this often requires additional share capital. The company acquires this by issuing new shares through an issue. Normally the existing shareholders obtain subscription rights that provide pre-emption rights to subscribe for shares in the issue. The number of shares that may be subscribed is set in relation to how many shares the shareholder held previously. The subscriber must pay a price (issue price) for the newly-issued shares which often may be lower than the market price. Immediately after the subscription rights – which normally have some market value – are divided from the shares, the price of the shares normally falls. The shareholders who do not subscribe may during the subscription period, which often lasts several weeks, sell their subscription rights in the marketplace where the shares are listed. After the expiry of the subscription period, the subscription rights lapse and are thereby unusable and valueless.

If the share premium reserve in a limited company has increased much in value, the company may transfer part of the value to the shareholders through a so-called bonus issue. In the event of a bonus issue, account is taken of the number of shares that the shareholder already has. The number of new shares that are offered to shareholders through the bonus issue is set in relation to how many shares the shareholder previously held. The shareholder obtains through the bonus issue more shares, but the shareholder’s proportion of the company’s share capital remains unchanged. The price of the shares falls in the event of a bonus issue, but through the increase in the number of shares, the shareholder retains an unchanged market value for his invested capital.

A limited company may also carry out a so-called directed share issue which takes place as an issue but is directed only to a limited group of investors. In the case of a directed share issue, there is normally a dilution of existing shareholders’ proportion of the number of votes and share capital in the company, but the number of shares owned is not affected and the market value of the invested capital is similarly normally not affected.

b) General information about share-related instruments

Closely related to shares are structured products, convertible bonds, primary capital certificates, share and share index options, warrants and depository receipts.

i) Structured products

Structured products are investment products that consist of two or more financial instruments. The most common are share index bonds and BMA (Bank deposits with share returns). Share index bonds are bonds where the return is normally dependent on the share index. If the index develops

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\(^5\) Until and including 31 December 2007 the threshold is 40 percent of the votes.
positively, it will normally give a positive return. In the case of a negative index development, the return may cease. The bond is redeemed on the redemption date at a pre-determined value plus the achieved gain. A BMA is a corresponding product where, instead of investing in a bond, one makes a bank deposit that is fixed for the product’s term.

ii) Convertible bonds

Convertible bonds are interest-bearing securities that within a certain time period can be exchanged for shares at a fixed price or according to a fixed formula. The price of convertible bonds normally follows the share price, but is expressed as a percentage of the par value of the convertible bond.

iii) Primary capital certificates

Primary capital certificates have clear similarities with shares. The difference relates first and foremost to ownership rights to the company’s assets and influence in the issuer’s governing bodies. There are also certain restrictions on the distribution of dividends. The listed primary capital certificates in Norway are issued by savings banks. More information on primary capital certificates can be found at [www.grunnfondsbevis.no](http://www.grunnfondsbevis.no).

iv) Share options

There are various different types of share options. Purchase options that have been acquired (call options) give the owner the right within a certain time period to purchase already issued shares at a pre-agreed price. Sale options (put options) give the holder the right to sell shares within a certain time period at a pre-greed price. Against each option that is acquired, a corresponding option is issued. The risk for a person who acquires an option is that it is reduced in value or matures valueless on the expiry date. The issuer of an option runs a risk that, if there are no special pre-conditions, may be of unlimited size. These instruments are further described in section 5 below.

The most extensive trade in share options takes place on the exchange where there is also trading in share index options. The index options give a gain or loss directly in cash related to the development in the underlying index.

The price of options (the premium) normally moves in the same direction as the price of the underlying share or index.

v) Warrants

Certain purchase rights with longer terms than standardised purchase options, normally called warrants, are also traded on the exchange. Warrants may be issued to purchase underlying shares or pay cash if the price of the underlying share exceeds the agreed future purchase price.

vi) Depository receipts

Depository receipts are a substitute for foreign shares and give the shareholder the same rights as owning the share itself. Depository receipts are traded like shares and the price development normally follows the price development on the foreign exchange where the share is traded.

3) Interest-bearing financial instruments (bonds)

An interest-bearing financial instrument is a receivable right on the issuer of a loan. The return is normally given in the form of interest (coupon). There are different types
of interest-bearing instruments depending on who is the issuer, the security that the issuer has provided for the loan, the term up to maturity date and the form of interest payment.

The interest (coupon) is normally paid either as a fixed or floating interest rate. On a fixed rate loan, interest is normally fixed at the start of the loan and applies for the whole term. In the case of loans with floating interest rates, interest is fixed normally 4 times a year for 3 months at a time based on the NIBOR interest rate. On certain loans no interest is paid, but only the par value is paid out on the loan’s maturity date (zero coupon). The purchase of zero coupon paper normally takes place at a significant discount that makes the effective interest rate the same as for securities with an ongoing coupon rate. An example of this is that all debt that the Norwegian state issues as Treasury bills are zero coupons.

The risk on an interest-bearing instrument consists partly of price changes that may occur during the term, because market interest rates change and partly of the risk that the issuer will be unable to repay the loan. Loans where full security for repayment is provided are thus less risky than loans without security. Generally speaking, one can say that the risk of loss on interest-bearing instruments is considered to be lower than for shares.

The market interest rate is determined each day, both on instruments with short terms (less than one year) e.g. certificates and on longer-term instruments, e.g. bonds. This takes place in the money and bond market. Market interest rates are affected by analyses and assessments that Norges Bank and other major institutional market participants make with regard to the development of economic factors, such as inflation, GDP growth, and the likely development in interest rates in Norway and other countries in the short and long term. Norges Bank also undertakes operations in the money and currency markets with a view to steering the development in market interest rates so that inflation does not rise or fall below a certain set target.

If market interest rates rise, the price of previously issued interest-bearing financial instruments will fall if they have a fixed interest rate, as new loans are issued with interest rates that follow the relevant market rates and thus provide a higher interest return than available on the previously issued instrument. Conversely, the price on previously issued instruments will rise when market interest rates fall.

Loans issued by the state, counties and municipalities (or guaranteed by such organisations) are regarded as being risk free with respect to redemption at the predetermined value.

Many bonds and certificates are classified by international rating agencies (e.g. Moodys or Standard & Poor’s), with regard to their credit risk and thus the likelihood of loss through a full or partial repayment failure. Bonds and certificates with the lowest rating (and the highest credit risk) are termed “junk” or “High Yield” securities. These are securities that give a higher interest rate than other certificates and bonds, but also have a greater likelihood of loss of all or part of the invested amount.

A number of bonds are listed and thus trading takes place in these financial instruments in a similar way to listed shares on a regulated market. In addition, the Oslo Stock Exchange offers an alternative marketplace for trading in bonds and certificates - Alternative Bond Market (ABM). ABM is a separate marketplace which is not regulated by, or subject to, the licence under the Stock Exchange Act, but which is administered and organised by the Oslo Stock Exchange.
Trading in bonds normally takes place in a different manner than for shares. In practice the interest and currency market can be regarded as a *quotation market* or *price-driven market*, in contrast to the stock market that is an order-driven market.

In the case of trading in standardised options, bonds, currency and interest derivatives, a firm normally indicates prices as market maker and publishes purchase and sale prices based on its own assessments of market conditions. The market as a rule will be very transparent, as prices are published on the firm’s website or through an information distributor. Customers can thus compare prices between different firms. These prices will either be indicative or binding for a specific volume per transaction. If the prices are indicative, the firm will give the customer a binding price on request to the firm. When contacting the firm, the customer is free to accept or reject the offer. If the customer accepts the price, the firm will be the counterparty in the transaction.

4) Mutual funds

A mutual fund is a “portfolio” of different financial instruments, for example, shares and/or bonds. The fund is owned by all those who save in the fund, unit holders, and is managed by a *management company*. There are various different kinds of mutual funds with different investment strategies and risk profiles. Set out below is a short description of the most common mutual funds:

i) **Equity fund** – a mutual fund that normally invests at least 80 per cent of the fund’s capital in shares (or other equity capital instruments) and which normally does not invest in interest-bearing securities.

ii) **Combination fund** – a mutual fund that is not defined as exclusively an equity fund or an interest fund. A combination fund may have an approximate fixed over weighting of shares or interest-bearing securities, but the proportion of different securities may also change during the life of the fund.

iii) **Fixed income fund** – a mutual fund that invests in securities other than shares. Fixed income funds are divided into bond funds and money market funds.

iv) **Index fund** – a mutual fund that is managed relatively passively in relation to the fund’s reference index.

v) **Fund in fund** – a mutual fund that invests its assets in a single (or possibly several) underlying mutual funds.

vi) **Hedge fund** (specialist fund) – Hedge fund is a general term for funds with mandates that give the manager considerable freedom. There is no exact definition of a hedge fund, but the word “hedge” means protecting oneself. A central point with this type of fund is therefore that they use a broad range of hedging instruments. They can, for example, sell instruments they do not own (short sale), invest larger amounts than the paid-in capital (gearing) or use options, futures and other derivatives. The objective in using such instruments is normally to give investors a relatively stable return over time, with lower risk than normal funds. While, for example, a normal equity fund usually has as its objective to follow a specific share index, a hedge fund will normally have as its objective to achieve a positive

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6 Source: www.vff.no
return irrespective of how the financial markets develop. As an investor, you should be aware that there are considerable differences between different hedge funds. Many hedge funds have a clearly lower risk than normal equity funds, but there are also hedge funds that have as an objective a much higher return over risk-free interest rates and that have the possibility of assuming a correspondingly higher risk. This can lead to significantly higher gains, or significantly higher losses for such funds, than other funds. A hedge fund is also not obliged to follow the Norwegian Mutual Funds Act or the UCITS Directive.

Unit holders receive the number of units in the fund that corresponds to their share of the invested capital in relation to the fund’s total capital. One of the ideas with a mutual fund is to invest in several different shares and other financial instruments. This means that the risk for unit holders is reduced in relation to the risk (for example) for shareholders who invest in only one or a few shares. Unit holders can avoid having to select, buy and sell, as well as monitor and otherwise manage their shares.

Units may be bought and redeemed (sold) through the management company. The units’ relevant value is calculated daily by the management company and based on the price development of the financial instruments in which the fund has invested. There are also units in funds that can be traded on a regulated market (Exchange Traded Funds –“ETF”).

For more information on mutual funds, see: www.vff.no

5) Derivative instruments

a) General information about derivative instruments

Derivative instruments are a form of agreement (contract), where the contract itself may be traded in the market for financial instruments. Derivative instruments are related to an underlying asset or to an underlying value. This asset or value (hereinafter just called asset) may consist of another financial instrument, another asset with economic value (for example, currency or raw materials) or a form of value barometer (e.g., an index). Derivative instruments can be used to protect against an expected disadvantageous price development on the underlying asset. They can also be used to obtain a gain or return on a smaller capital contribution than is required to make a corresponding trade directly in the underlying asset. Derivative instruments can also be used for other reasons. The use of derivative instruments is based on a certain expectation as to how the price of the underlying asset will develop over a certain time period. Before beginning trading in derivative instruments, it is important that the customer understands the purpose and the price developments that can be expected on the underlying asset, and on this basis chooses the correct derivative instrument or combination of such instruments.

One can describe trading in derivative instruments as trading in, or moving, risk. If one, for example, expects a price fall in the market, one can purchase put options that increase in value if the market falls. In order to reduce or avoid the risk of a price fall, the purchaser pays a premium, i.e. what the option costs. Trading in derivatives may in many cases not be recommended for customers with little or limited experience of trading in financial instruments, since such trading often requires special expertise. It
is important to be aware of the following characteristic properties of derivative instruments for those intending to trade in such instruments.

The construction of a derivative instrument means that the price development on the underlying asset is reflected in the price of the derivative instrument. This price reflection is often more substantial in relation to the contribution than the value change on the underlying asset. The price reflection is therefore called the gearing effect and may lead to a greater gain on contributed capital than if the investment had been made directly in the underlying asset. On the other hand, the gearing effect may mean a greater loss on the derivative instrument compared with the change in value on the underlying asset, if the price development on the underlying asset is different from that expected. The gearing effect, i.e. the possibility of gain or the risk of loss, varies depending on the derivative instrument’s construction and area of application. A greater requirement is therefore imposed with regard to monitoring price developments on the derivative instrument and the underlying asset. The customer should in his own interest be prepared to trade quickly, often during the day, if the investment in the derivative instrument develops in an unfortunate direction.

The party who assumes an obligation to issue an option or enter into a futures contract is required from the start to provide security for his position unless the securities firm can otherwise be considered as having received adequate security. The requirement as to security changes in line with the price of the underlying asset rising or falling, and thus the value of the derivative instrument increasing or falling. Further security in the form of additional collateral may therefore be required. The gearing effect thus also has an impact on the security requirement, which may change rapidly and radically. If the customer does not provide sufficient security, the counterparty or the securities firm has the right, without the customer’s consent, to terminate the investment (close the position) in order to reduce the loss. A customer should thus follow the price development and the security requirement carefully in order to avoid an involuntary closure of the position.

The term of derivative instruments may vary from a very short period up to several years. Price changes are often greatest on instruments with short (remaining) durations and the opposite for interest-based products. The price, for example, of a purchased option generally reduces more rapidly towards the end of the term as the time value declines. The customer should, therefore, also carefully monitor the duration of derivative instruments.

Derivative instruments are traded in standardised and non-standardised forms. Trading in **standardised** derivative instruments takes place on regulated markets and follows contracts and terms that are standardised by an exchange or a clearing organisation. On the Norwegian derivatives market, for example, the Oslo Stock Exchange offers trading in standardised options and futures. The following regulated markets in Norway offer trading in standardised derivative instruments:

- **Oslo Børs ASA**\(^7\) – trading in standardised options and futures
- **Nordpool ASA** – trading and clearing of physical and financial power contracts in the Nordic region
- **Imarex ASA** – trading and clearing of commodities derivatives (freight and oil)
- **Fish Pool ASA**\(^8\) – trading in salmon contracts

\(^7\) All trades on Oslo Stock Exchange are cleared by VPS Clearing ASA
\(^8\) All trades on FishEx ASA are cleared by Nord Pool Clearing ASA
FishEx ASA\(^9\) – trading in salmon contracts

Trading in foreign standardised derivative instruments normally follows the rules and conditions for the country where the exchange trading and clearing is organised. It is important to note that these foreign rules and conditions do not need to be the same as those applying in Norway.

A number of securities firms offer their own forms of derivative instruments, where they themselves provide trading and settlement. Such derivative instruments can be characterised as *non-standardised* derivative instruments (OTC derivatives). Persons wishing to trade this type of derivative instrument should carefully study the contracts and terms that regulate trading in them.

\*b) Definitions*

\*i) Option.

An agreement that gives one party (the Holder) in a certain time period a right, but not an obligation, to buy (Call option) or sell (Put option) an agreed quantity of financial instruments or other underlying asset at a pre-agreed price from/to the other party (the Issuer). The time when one can exercise the right may depend on what type of option it is. In the case of an *American option* the right can be exercised during the entire term. In the case of a *European option* the right can only be exercised on the expiry date. The holder pays a premium to the issuer and obtains an entitlement to exercise the right in the contract, but has no obligation to do this. The issuer is, however, obliged to perform the contract if the holder requires. The price of the option normally follows the price of the underlying asset. The risk for the person who acquires an option is that it reduces in value or becomes valueless on the expiry date. The issuer of an option runs a risk, unless special conditions apply, that may be unlimited in size.

\*ii) Interest rate options

An interest rate option is a right, but not an obligation, to obtain an interest rate fixing at a pre-agreed interest rate for an agreed period. With this instrument one can, for example, secure that loan interest rate does not exceed an agreed level, alternatively that investment interest does not fall below an agreed level. The most commonly used types of interest rate options are caps, floors and “swaptions” (option on interest rate swap). A combination of a cap and a floor will provide an interest rate corridor (collar).

\*iii) Currency options

A foreign exchange option is a derivative financial instrument where the owner has the right but not the obligation to exchange money denominated in one currency into another currency at a pre-agreed exchange rate on a specified date.

\*iv) Future.

An agreement where both the buyer and seller are committed to an agreed quantity of financial instruments or other underlying asset being transferred from seller to purchaser at an agreed price on an agreed date that is further in

\*9 All trades on Fish Pool ASA are cleared by NOS Clearing ASA.
the future than the normal settlement deadline for the underlying financial instrument or other underlying asset covered by the agreement.

v) **Forward rate agreement (FRA)**

A FRA contract is a mutually binding agreement to purchase or sell an interest rate in the future. In the case of a purchase, one secures a future borrowing rate, while a sale secures a future investment rate. The interest rate, interest period and amount are agreed when the contract is entered into. A FRA is thus a suitable instrument to secure the interest rate on a future loan or investment or on a future interest adjustment date. A FRA contract secures against unexpected market developments for up to two years and is therefore a short-term hedging instrument.

vi) **Currency forward (outright) contracts**

A forward contract is a reciprocally binding agreement to purchase or sell an agreed currency at a specified rate for a specific date in the future. The forward contract is suitable for hedging the exchange rate for future receipts and payments in foreign currencies. The forward rate is the sum of the spot rate at the time the contract is entered into and a premium or discount. The premium/discount is determined by the interest rate difference between the currencies involved for the period from the start of the contract until settlement takes place.

vii) **Option with a variable strike price.**

This is in principle a futures contract, but where the margin collateral is paid in the form of an option premium. The purchase of the product contains in addition to the purchase of an American call option also the sale of a European put option with the same strike price. The European put option lapses if the call option is exercised or closed. In addition, the product contains an option for the seller, in the event of a defined price fall on the underlying financial instrument, to require the closure of the option and a simultaneous issue of a new option with a lower strike and correspondingly higher premium.

viii) **Index option/Index future.**

A contract where the underlying asset is not a security, but an index value. Such an agreement is not settled by delivery of financial instruments, but by a calculation of the agreement’s value in money.

ix) **Price swap.**

A contract that in risk terms is fully equivalent to a futures contract, but where delivery of the underlying financial instrument does not take place on expiry. On expiry there is a monetary settlement based on the difference between the swap price and the market price on the expiry date.

x) **Interest rate swap agreement (swap)**

An interest rate swap agreement is an agreement to exchange future interest payments. The one counterparty undertakes to pay a fixed interest rate throughout the term of the agreement, while the other counterparty undertakes to pay floating (NIBOR) interest rate. In this way the interest rate on a loan or investment can in reality be changed from floating (NIBOR) to fixed rate or from a fixed to a floating rate. The fixed rate is normally paid annually, while the floating rate is paid quarterly or semi-annually. A new floating interest rate is set correspondingly quarterly or semi-annually. With
an interest rate swap it is possible to fix interest rates for up to 30 years, but it is most common that the fixed period is up to 10 years.

xii) Short sale.
A sale of financial instruments that one does not own, but has borrowed in order to settle correctly. The financial instruments must be purchased at a later date and delivered back to the lender.

xiii) Securities swap.
A securities swap is an aggregation of (at least) two financial instruments, where one purchases one instrument (long position) and sells the other short (short position).

xiii) Underlying financial instrument(s).
This is (these are) the financial instrument(s) the option gives the Holder the right to sell or purchase, or the financial instrument(s) which are agreed to be traded in a futures contract, or the financial instrument(s) which are agreed as the settlement basis in a price swap.

xiv) Exercise.
Exercise of an option will require delivery of the underlying financial instrument in accordance with the option contract. Normally the Holder can require partial exercise of the option, at the same time as the option is maintained for the remainder.

xv) Expiry day.
The day an option must be required to be exercised or lapse without value. The expiry date for a future is the day the contract is settled through being changed to a trade with an ordinary settlement deadline for delivery of the underlying financial instrument against payment of the purchase price.

xvi) Settlement day.
The day a future, option or price swap is finally closed through the underlying financial instruments being delivered against the agreed purchase price, or the monetary settlement falling for payment. The settlement day is normally three exchange days after the Expiry day.

xvii) American option/future.
An option/future where the Holder can require redemption, either fully or partially, at any time up to the agreed time on the Expiry day.

xviii) European option/future.
An option/future that can only be required to be exercised on the Expiry day.

xix) Spot price.
The price the financial instrument is traded for delivery in accordance with the normal settlement deadline for the instrument.

xx) Strike price.
The agreed price for exercise of an option.

xxi) Forward price.
The agreed price for settlement of a futures contract.

xxii) Swap price.
The agreed price to be used for settlement of a price swap.

**xxiii)** **Option premium.**
The amount the Holder has paid the Issuer to purchase the option.

**xxiv)** **Hedging share/Hedge**
If a seller of an option/future/swap does not wish to hold a price risk, he purchases/short sells a number of the underlying securities so that any value increase on the derivative sold is matched by a corresponding increase in value on the underlying securities. The securities that in this manner secure the issuer against market risk are often called Hedging shares or a Hedge.

**xxv)** **Clearing.**
On clearing of derivatives, the clearing institutions take over as counterparty between the purchaser and seller of derivative contracts and guarantee settlement of the contract. The clearing institution acts as seller against the purchaser and as purchaser against seller. In the standardised derivatives market, derivative contracts are normally cleared by a clearing institution with a licence. In the OTC market it is normally the securities firm that has this role.

c) **Call options**

i) **Hold/buy a Call option.**
When one buys a call option, one pays an option premium together with the costs in connection with sale and administration of the option contract.

The maximum amount that one can lose as holder of a call option is limited to the option premium and the costs paid. The maximum loss arises when the price of the underlying financial instrument is lower or the same as the strike price.

The gain potential is in theory unlimited. The gain is the value of the underlying financial instruments at the time of redemption less the strike price and the option premium including costs.

ii) **Issue/sell a Call option.**
When one sells a call option, one receives an option premium less costs in connection with the sale and administration of the option contract.

The gain potential on issuing is limited to the net option premium. If the strike price is higher or the same as the market price of the underlying financial instrument, one retains the option premium without the holder normally requiring to purchase the securities.

If one has hedged by owning the underlying financial instruments, no loss arises in the event of a rise in price, but one has lost the increase in value beyond the option premium. In the event of a fall in price, a loss arises when the price of the underlying securities falls below the cost price of the security less the option premium received.

If one has not hedged by owning the underlying financial instruments, one has an unlimited loss potential in the event of a rise in price. If the holder requires the option to be exercised, the issuer must purchase the financial instruments in the market at market price. The loss is calculated as the market value of the underlying financial instruments less the strike price and option premium.
d) Put options

i) Hold/buy a Put option.

When one buys a Put option, one pays an option premium together with costs in connection with sale and administration of the option contract.

The maximum that one can lose as holder of a Put option is limited to the option premium and the costs paid. The maximum loss arises when the price of the underlying financial instruments is higher than or the same as the strike price.

The gain potential is limited to the strike price less the option premium including costs. The gain is the strike price less the value of the underlying financial instrument at the time of exercise and the option premium including costs.

ii) Issue/sell a Put option.

When one sells a put option, one receives an option premium less costs in connection with the sale and administration of the option contract.

The gain potential on an issue is limited to the net option premium. If the strike price remains lower or the same as the price of the underlying financial instrument, one retains the option premium without the holder normally requiring to sell the securities.

In the event of a price fall, a loss arises when the value of the underlying financial instrument is lower than the strike price minus the net option premium. The loss is limited to the strike price minus the net option premium.

e) Futures/Price swaps

In the case of futures contracts, no option premium is paid, but the agreed forward price will normally be set as the spot price (the market price on the trading day) on the underlying financial instrument plus the interest cost up to the future’s settlement day. In addition, one pays costs in connection with the sale and administration of the futures contract.

In the case of a futures trade the purchaser has entirely taken over the price risk on the underlying financial instrument. If the price falls, a loss arises equal to the difference between the value of the underlying financial instrument and the forward price. If the price rises, a corresponding gain arises equal to the difference between the value of the underlying financial instrument and the forward price. In addition, the purchaser has a credit risk that the seller will deliver the agreed financial instruments on the settlement day.

A seller who owns the underlying financial instruments has no risk relating to the price development on the underlying financial instrument, only a credit risk that the purchaser can settle the agreed amount on the settlement day.

If the seller does not own the underlying financial instruments, he has in principle an unlimited loss potential in the event of a rise in price. The loss is calculated as the value of the underlying financial instruments less the agreed forward price. Correspondingly, the seller has, in the event of a price fall, a gain potential which is calculated as the forward price less the value of the underlying financial instruments. The seller also has a credit risk that the purchaser can settle the agreed amount on the settlement day.
f) Options with variable strike price

This is an option (see above), where the following additional provision is included (when the underlying financial instrument is a share):

“If the market value of the underlying financial instrument falls so that the Strike price represents more than (an agreed) per cent of the market price of the financial instrument, the option seller has the right to require to repurchase the option at a price which is equal to the difference between the underlying financial instrument’s market price and the option’s strike price. In connection with such a claim for repurchase, the option purchaser has a right to exercise the option or to buy a new option with the same expiry date and with a strike price equal to (an agreed) % part of the new market price for the underlying financial instrument. The price of the new option is set as the difference between the market price and the new strike price on the underlying financial instrument. With the exception of the strike price and premium, the terms of the new option agreement shall be the same as the original option contract.”

In the case of such an option contract, the purchaser has taken over entirely the price risk on the financial instrument. If the price falls, a loss arises equal to the difference between the value of the underlying financial instrument and the sum of the strike price and option premium. If the price rises, a corresponding gain arises equal to the difference between the value of the underlying financial instrument and the sum of the strike price and option premium. In addition, the purchaser has a credit risk that the seller will deliver the agreed financial instruments on the settlement day.

Assuming that he owns the underlying financial instruments, the seller has no risk relating to the price development of the underlying financial instrument, only a credit risk that the purchaser can and will settle on the settlement day. If the seller does not own the underlying financial instruments, his risk profile is a mirror image of the purchaser’s.

g) Short sales/Lending of financial instruments

In the case of lending of financial instruments that are sold in the market, a borrowing charge is paid to the lender of the securities, together with normal commission for trading the borrowed shares.

The risk on a short sale corresponds entirely to that when selling a future without owning the underlying financial instruments. If the price falls, a gain arises equal to the difference between the market value of the underlying financial instrument and the price one obtained on the sale of the financial instrument. If the price rises, a corresponding loss arises equal to the difference between the market value of the underlying financial instrument and the price one obtained on the sale of the financial instrument. The loss potential on a short sale is unlimited, while the gain potential is limited to the sales proceeds (if the value of the financial instrument falls to zero).

If a dividend or similar is paid on the financial instruments during the borrowing period, tax rules may make the loan unfavourable for the borrower.

The lending of financial instruments can be agreed for a period or without a date for re-delivery. Unless otherwise agreed, the lender of financial instruments can, on one day’s notice, require these to be delivered with a deadline equal to the
ordinary settlement deadline for securities (T+3). This normally applies also when
the loan is agreed for a period and represents an additional risk for the borrower.
The lender has the same risk as when registered as the owner of the shares, in
addition to a credit risk relating to re-delivery of the shares lent. Loans made over
year-end are subject to special tax treatment that may make the loan
unfavourable for the lender.

h) Securities swap

The purchase sum for the long position is covered by using the sales proceeds
from a short position. Any differences, as well as the security requirement, must
be covered separately.

Such swaps are used most often when one believes the price of the financial
instruments will move in the opposite direction, but that general market
fluctuations will have an equal impact on both positions. A gain arises if the long
position in relative terms rises more in value than the short position. In the
opposite case, a loss arises.

The risk in such a swap is in theory unlimited.

i) Loan-financed trading

Financial instruments may in many cases be purchased with partly borrowed
capital. Since both the contributed capital and the borrowed capital affect the
return, the customer can, through loan financing, obtain a greater gain if the
investment develops positively (after adjusting for cost and interest rate)
compared with an investment which is only made with one’s own contributed
capital. The debt that is related to the borrowed capital is not affected if the price
of the purchased instrument changes in a positive or negative direction, which is
an advantage in the case of a positive price development. However, if the price of
the purchased instrument develops in a negative direction, this represents a
Corresponding disadvantage since the debt remains unchanged. In the event of a
fall in price, the contributed capital can therefore be wholly or partly lost, at the
same time as the debt must be paid wholly or partly through sales proceeds from
the financial instruments that have fallen in value. The debt must also be paid
even if the sales proceeds do not cover the entire debt.