



CLARKSONS

CHARACTERISTICS OF AND RISKS ASSOCIATED WITH FINANCIAL INSTRUMENTS

CLARKSONS SECURITIES AS

TABLE OF CONTENTS

Characteristics of and Risks Associated with Financial Instruments	3
1. Risks related to trading in financial instruments	3
2. Short trading	13
3. Sustainability reporting, financial analysis and possible pricing effects	13
4. Trading Frequency and Costs	16
5. Debt-financed trading	16

CHARACTERISTICS OF AND RISKS ASSOCIATED WITH FINANCIAL INSTRUMENTS

This document is standard by the Norwegian Securities Dealers Association.

As an investor, you have an independent responsibility to understand the risk in the investments you choose. We will therefore emphasise some important assumptions.

- trading in financial instruments takes place at your own risk.
- before starting to trade in financial instruments, you must carefully study the firm's general business terms and conditions as well as any other relevant information on the financial instrument in question and its characteristics and risks.
- you must immediately scrutinise the contract note and submit any complaints regarding errors.
- you are responsible for monitoring changes in the value of the financial instruments in which you have invested.
- you must regularly assess your investments and make the necessary changes to adapt these to your investment strategy and risk profile.
- investments with an element of gearing must be monitored with care.

1. Risks related to trading in financial instruments

1.1. Risk in general

Financial Instruments normally generate a direct return in the form of **dividends** (equities and fund units) or **interest** (interest-bearing instrument). In addition, **gains or losses can be made** due to the increasing or decreasing of the price of the instrument. The total return is the sum of the dividend/interest rate and the price change of the instrument.

Naturally, the investor seeks a total return that is positive. However, there is also **a risk that the total return will be negative**, i.e. that there will be a **loss** on the investment. The risk of losses varies between different instruments. In an investment context, the word risk is often used to express both the risk of loss and the possibility of gain. However, in the description below, the word risk is used only to describe the risk of loss. It is important to be aware of the relationship between the risk of loss and the possibility of gain. Lower risk of losses will normally also mean less profit potential, and vice versa.

There are various ways of investing in financial instruments in order to reduce the risk involved. It is normally better from a risk point of view to invest in several different financial instruments rather than a single one or only a few financial instruments. These instruments should have characteristics so the risk is spread, and they should not gather risks that may be triggered simultaneously. Investors can also invest in negative positions in instruments (short positions). Such investments will increase in value when the share price falls.

The client bears the risk of an investment declining in value and must therefore familiarise himself with the terms and conditions, prospectuses or similar, that apply to trading in such instruments and about the instruments' particular risks and characteristics. The client must also continuously monitor its investments in such instruments. This applies even if the client has received individual advice in connection with the investment. Information for use in monitoring prices and thereby developments in the value of own investments can be found in price lists published through mass media, such as trading platforms, stock exchange websites, newspapers and, in some cases, investment firms.

The Client must exercise particular caution if the financial instrument contains elements that increase risk, such as leveraged instruments or derivatives. Such instruments will often fall more in value than the underlying instrument, resulting in a loss of the entire investment, and in some cases also more than the investment.

There are many different factors that can influence developments in the value of financial instruments. The client should therefore familiarise himself with the factors that influence different instruments and be aware of which elements may influence his or her own investments. The client should continuously assess its investment portfolio and, if necessary, make changes to adapt it to the client's investment strategy and risk profile.

1.2. Equities and equity-related instruments

A share price is normally determined on a marketplace based on supply and demand. **The** price of a share is largely influenced by **the company's future prospects**. Whether a share price goes up or down depends on investors' assessments of the company's ability to make **future gains**. Expected developments in business cycles, technology, legislation, competition, etc. may determine price developments and demand for the company's products or services, and are fundamental to investors' assessment of the company and thereby to the price development of the company's shares. Assessing a company's future prospects is not an exact science, and different investors may have different ratings; a prerequisite for the fact that in the market there will be both buyers and sellers of the stock. The starting point for an investment decision is that all available public information is taken into account in the current price of the security. A company with bright future prospects will thus normally be highly priced, which means that the risk of loss is present if the future prospects are not met.

The price may be affected by general **market risk – the risk** of a fall in prices in the market as a whole, or in certain parts of the market, where the client has made his investment. Price developments in financial instruments listed on **foreign-regulated** markets may also influence price developments in Norway.

The price is also affected by developments in the industry to which the company belongs, **industry-specific risk** – the risk that a specific industry performs worse than expected or is affected by a negative event, so that the financial instruments linked to the companies in the relevant industry may thus fall in value. The price of shares in companies belonging to the same industry/sector is often affected by changes in the prices of other companies within the same industry/sector, regardless of the companies' home country.

Other **factors directly related** to the company, such as changes in the company's management and organisation, production interruptions etc., can also affect the company's future ability to generate gains, both in the short and long term. This is called company-specific risk – the risk that a company performs worse than expected or that the company is hit by a negative event, so that the financial instruments linked to the company may thus fall in value.

Framework conditions for business activities, both national and international, may also influence share prices. Changes in tax levels nationally and in other countries affect companies' cost level and thus the competitive situation. International agreements between countries on customs duties and taxes on imports and exports of goods and services affect the competitive situation between companies and thereby share prices. Violent events such as disasters, terrorist attacks and war can have a major impact on stock prices on stock exchanges worldwide.

Climate change creates risks and opportunities for companies and investors. Sectors and companies will be affected by climate change to varying degrees. The impact of sustainability legislation on investment decisions is discussed in more detail in section 5 below.

The **general interest rate level** (the market rate) also plays a decisive role in exchange rate developments. If the market interest rate rises, the present value of the future cash flows generated by the enterprise will be lower as the discount factor increases. Higher interest rates may make investing in interest-bearing financial instruments more attractive, so that investors will shift parts of their investments from the equity market to the fixed income market, resulting in a decline in demand for equities. Normally, equity prices fall when demand falls. Share prices are also adversely affected by an increase in interest rates on the company's debt, because the increase in interest rates reduces the future financial performance of the company.

Change in **exchange rates** can also affect the stock price. Companies with revenues and expenses in different currencies will be particularly vulnerable to such fluctuations. This applies to several Norwegian export companies. When investing in foreign markets, fluctuations in exchange rates will also affect the result after exchanging the purchase and sale price to NOK.

Balance sheet risk is an expression of the risk inherent in being a shareholder in enterprises where the cash flow is negative while the debt burden is relatively high, such that the enterprise's cash reserves are under pressure and borrowing or a share issue must be made to strengthen liquidity. Such rescue issues often have to be done at very low prices. This may involve a significant **dilution risk** for investors not participating in the issue.

In the worst case, the company may perform so poorly that it has to start debt negotiations or be declared **bankrupt**. Shareholders have the last priority to receive something from a bankruptcy estate and will normally also have their values substantially reduced through a negotiated debt settlement. In the event of bankruptcy, the company's debts must first be satisfied in full. Only in exceptional cases will there be funds left in the company after payment of debt, so that in the event of bankruptcy, the shares in the company will normally become worthless.

Liquidity risk. Financial market participants will often have different perceptions of how equity prices will develop, often because they give weight to different factors that influence price developments or have different expectations concerning developments in the factors that influence prices. This means that there are both buyers and sellers. In a given situation, an investor may find that there is little volume on the buyer's side and that a sell order may push prices far down to attract buyers.

The turnover, i.e. how much is bought or sold of a particular stock, affects the stock price. High turnover reduces the difference, also called the **spread**, between the price buyers are willing to pay (the bid price) and the price demanded by sellers (the selling price). A stock with high turnover, where large amounts can be traded without major impact on its price, has good **liquidity** and is therefore easy to buy and sell. Companies that are included in a benchmark index on a regulated market normally have high liquidity.

It is important to be aware that the risk associated with equities can vary considerably from company to company regardless of listing location (stock exchange or MTF or unlisted list). There is a big difference between the risk associated with shares in a company that has shown good earnings over time and shares in a company that does not have appreciable earnings, or has a loss, but where the pricing of the shares is, for example, based on the company succeeding in launching a new product in the future that will yield high earnings. The company may fail, production may become less profitable than estimated, new competitors may enter the field, etc.

It is important for investors to make up their minds about the likelihood of a company going bankrupt in the same way as assessing the probability of success. In companies with a long stock exchange history, there will normally also be more information available than start-up companies, with a short history, which further reinforces the vigilance investors should exercise.

1.3. Interest-bearing instruments

The risk on an interest-bearing instrument consists partly of the change in price that may occur during the term to maturity because the market interest rate changes, and partly of the market's assessment of the risk that the issuer will not be able to repay the loan. Loans where adequate collateral for repayment has been provided are thus less risky than unsecured loans. An investor holding a fixed income securities until maturity is not subject to changes in market interest rates during maturity. If, on the other hand, fixed income securities are to be disposed of before maturity, changes in market rates determine the price achieved.

Loans where credit risk is assessed as particularly high are characterised by the issuer having to pay a particularly high interest rate. Such fixed income securities are often referred to as **high-yield** bonds.

In the event of bankruptcy or debt negotiation, the owner of an interest-bearing instrument may lose all or part of its investment. In the event of bankruptcy, all debt must be paid before it can accrue to shareholders, so in general it can be said that the risk of losses on interest-bearing instruments is lower than for equities.

The most important interest rate for the Norwegian money market is NIBOR, which is calculated and published for 1 week, 1 month, 2 months, 3 months and 6 months. The interest rate is regulated daily and appears on the website of Norske Finans Referanser AS

Market interest rates are influenced by analyses and assessments made by Norges Bank (the central bank of Norway) and other large institutional market participants with regard to developments in economic factors such as inflation, business cycles and interest rate developments in other countries in both the short and the long term.

If the market rate rises, the price of the interest-bearing financial instrument will fall since the return on the instrument relative to the market rate has become less favourable. Conversely, the price of fixed income instruments will rise when market interest rates fall.

Bonds can either have a fixed interest rate throughout the maturity, or an agreement on periodic interest rate adjustment, based on the market rate with a credit mark-up. The price of bonds with interest rate adjustment will react less to changes in market interest rates than fixed-rate loans.

Loans issued by the Norwegian state, county authorities and municipalities (or guaranteed by such organisations) are considered to be virtually risk-free with regard to redemption to the predetermined value on the maturity date.

1.3.1. Contingent convertible securities», «CoCos».

A CoCos or "hybrid bond" is an unsecured interest-bearing financial instrument and is a non-due claim on the issuer, which will normally be a bank or other institution subject to the capital requirements regulations. CoCos issued by banks are described below.

Both commercial banks and savings banks may be issuers of CoCos. Banks issue this type of bond to satisfy the publicly stipulated capital adequacy requirements, or to obtain a capital adequacy ratio higher than the minimum requirements. If a bank were to be wound up, the holders of CoCos would have priority over the holders of equity instruments (shares or equity certificates), but behind the holders of subordinated loans, senior bonds and depositors, etc.

CoCos must satisfy requirements laid down in regulations in order to be granted the status of "other approved core capital". The regulation is based on EU rules.

CoCos are regarded as a complex financial instrument because they have characteristics that make it difficult to assess risk. This can also affect pricing in the secondary market. In terms of risk, CoCos are close to equities or equity certificates.

CoCos are an unsuitable or inappropriate investment product for retail clients, as it takes considerable knowledge and experience of complex financial instruments to be able to understand the risks associated with CoCos.

The following risk elements follow from the regulation of CoCos:

- **Risk of change in regulation**
 - The regulations governing CoCos may change after a bond is issued, which can directly affect the characteristics and risks of the CoCos.
 - The loan is perpetual, but the Issuer may, subject to certain conditions, buy back all or part of the loan or redeem the CoCos after 5 years if Finanstilsynet (the Financial Supervisory Authority of Norway) agrees.
 - The issuer may, with the consent of Finanstilsynet, redeem or buy back the fund bond if a change in rules means that the capital (in whole or in part) can no longer be regarded as "other core capital" or if the tax treatment of CoCos for the Issuer changes significantly
- **Risk of impairment or conversion**
 - The issuer must either (depending on the loan agreement) write down the value of the CoCos or convert capital to CET1 if the bank's CET1 ratio falls below a stipulated percentage, currently 5.125%. However, this percentage can be changed by regulatory amendments, which are either set nationally or by the EU.
 - Finanstilsynet may instruct the issuer to write down or convert the CoCos.
- **Risk of loss of interest**
 - The issuer may choose not to pay interest without this being regarded as default.
 - Finanstilsynet may order the Issuer to stop interest payments.
 - If the Issuer breaches capital requirements, interest payments will normally have to be expected to be stopped.
 - There is no accumulation of interest that is not paid.

- **Risk of failure to revaluation**

- If the Issuer has had to write down the value of the CoCos, the Issuer may write up the value again by adding a share of the accumulated profit
- There are rules for how quickly the Issuer can rewrite the CoCos. These relate inter alia to the share of profit corresponding to the share of capital accounted for by the CoCos prior to the write-down.

1.4. Risks associated with trading in derivative instruments in general.

Trading in derivative instruments is linked to particular risks in addition to risks associated with the underlying financial instrument. The client bears this risk and must carefully familiarise himself with the characteristics of the derivatives, as well as the terms and conditions, in the form of general terms, prospectuses or similar, that apply to trading in such instruments. The Client must also continuously monitor its positions in such instruments. Information for surveillance can be found in price lists on the Internet, in the mass media and from the client's investment firms.

When purchasing derivatives, one can obtain a time-limited market exposure that is significantly greater than the amount invested. The amount one pays for an option is called premium and is the payment to gain from a favourable development of the price of the underlying asset. The value of an option will follow the value of the underlying asset. Although the change in the value of the option in nominal terms will be smaller than in the underlying asset, the relative change in relation to the amount invested will be considerably larger. This is therefore called leverage effect and can lead to larger losses and gains on invested capital than if the investment had been made directly in the underlying asset.

An example of a call option:

Market value underlying asset is NOK 100 The option premium is NOK 10

After some time, the price of the underlying asset has increased by 10 %, i.e. NOK 10. In our example, this could result in a change in the value of the option of NOK 5, i.e. 50%

One can describe trading in derivative instruments as trading in, or transfer of, risk. For example, anyone who expects a price decline in the market can buy put options that increase in value if the market falls. The gain must be paid by the seller of this option, which therefore carries the risk of loss in the event of a price decline. The option premium is payment for this risk.

Trading in derivatives can in many cases not be recommended for clients with little or limited experience of trading in financial instruments, as derivatives trading often requires special knowledge. Because the leverage effect may result in larger losses and gains on invested capital than if the investment had been made directly in the underlying asset, there are considerable requirements for monitoring price developments in the derivative instrument and the underlying asset. In its own interest, the client should be prepared to act quickly, often during the day, if the investment in the derivative instrument develops in an inappropriate direction.

The party that assumes an obligation by issuing an option or entering into a forward agreement is obliged from the outset to provide collateral for its position (**margin requirements**). As the price of the underlying asset changes, and thereby the value of the derivative instrument increases or decreases, so does the collateral requirement. Additional security in the form of additional collateral may therefore have to be required.

The leverage effect thus also applies to the collateral requirement, which can change quickly and radically. If the client does not provide sufficient collateral, the clearing organisation or investment firm has the right, without the client's consent, to terminate the placement (close the position) in order to reduce its risk. A customer should therefore pay close attention to price developments and security requirements in order to avoid an involuntary closure of the position.

The price of a derivative also depends on the term to maturity, i.e. the period of time for which the option is valid. This element is called the time value. The term to maturity can vary from a very short time to several years. The relative change in price is often greatest for instruments with short (remaining) term to maturity. The price of an option held generally decreases more rapidly towards the end of the maturity as the time value decreases. The client should therefore also closely monitor the maturity of the derivative instruments.

1.5. Risks in different types of derivative instruments

The main types of derivative instruments are options, futures and swap agreements. One can trade derivatives with different types of underlying assets. Derivatives with commodities with e.g. oil, soy or gold as the underlying value, are called commodity derivatives.

1.5.1. Option

An option is a fixed-term agreement whereby one party (issuer of an option contract) undertakes to buy (Put option) or sell (Call Option) the underlying financial instrument to the other party (holder of the contract) at a pre-agreed price (strike), if required by the holder. The time when the holder can exercise this right depends on the type of option in question. In the case of a **US option**, the right can be exercised throughout the term. In the case of a **European option**, the right can only be exercised on the expiration date. The holder pays a premium to the issuer for the rights stated in the contract. The main elements of the price of an option are the difference between the market value of the underlying financial instrument and the agreed strike as well as a time value, which is an expression of possible future fluctuation in the value of the underlying financial instrument. The time value decreases as the remaining term to maturity is reduced, so that the price of a call option may decrease even if the value of the underlying financial instrument has risen. The price of an option also contains an interest rate element.

The investor must take all such price elements into account when considering whether to close a derivative position or still retain it.

1.5.2. Call options

By **purchasing** a call option, one obtains **the right** to purchase the underlying asset at a future date at a predetermined price. When you buy a call option, you pay an option premium as well as costs associated with trading and administration of the option agreement.

The maximum a call option holder can lose is the option premium and the costs paid. The maximum loss occurs when the price of the underlying asset remains lower or equal to the agreed strike.

The profit potential is, in theory, unlimited. The gain is the value of the underlying asset minus the strike and the option premium including costs. Note that you can lose on the investment even if the price of the underlying asset has risen, if the increase is less than the option premium incl. costs.

Issuing/selling a call option imposes an **obligation** to sell (if the holder requires to buy) the underlying asset at a future date at a predetermined price. When you sell a call option, you receive an option premium less costs in connection with the turnover and administration of the option agreement.

The profit potential of an issue is limited to the net option premium. If the strike remains higher or equal to the market price of the underlying asset until the expiry date, the holder will not normally call the option, and the net option premium can be recognised as income in full.

The issuer of a call option has an unlimited loss potential in the event of a price rise. If the holder demands to exercise the option, the issuer must purchase the assets in the market at market price. The loss is calculated as the market value of the underlying financial instruments minus the strike and option premium.

It can also be agreed that upon redemption, the issuer may pay the holder the profit in the form of cash.

If the writer has hedged its position by owning the underlying financial instruments (Covered call), no payable loss occurs on price rise, but you miss out on the increase in value over and above the strike plus the net option premium. Tying up the underlying financial instruments exposes oneself to the risk of loss in the event of a fall in prices, and losses occur when the decline in value exceeds the option premium. If you sell the underlying assets, you are exposed to risk if the price rises again. The issuer of covered calls often attempts to manage the risk of a fall in prices by selling parts of the underlying assets.

1.5.3. Put options.

The buyer of a sell (put) option obtains the **right** to sell the underlying asset at a future date at a predetermined price. When you buy a put option, you pay an option premium as well as costs associated with trading and administration of the option agreement.

The maximum the holder of a put option can lose is limited to the option premium and the costs paid. The maximum loss occurs when the market value of the underlying asset remains higher or equal to the strike.

The gain is the strike price less the value of the underlying asset at the time of redemption and the option premium including costs. The maximum gain occurs when the value of the underlying asset has dropped to zero and constitutes a strike less the option premium including costs.

Issuing/selling a put option imposes an **obligation** to buy (if the holder requires to sell) the underlying asset at a future date at a predetermined price. When you sell a put option, you receive an option premium less costs in connection with the turnover and administration of the option agreement.

The profit potential of an issue is limited to the net option premium. If the value of the underlying asset remains higher or equal to the strike, the holder will not normally demand to sell it, and the net option premium can be recognised as income in full.

In the event of a price fall, losses occur when the value of the underlying asset is lower than the strike minus the net option premium. The maximum loss is limited to the strike minus the net option premium.

1.5.4. Forward/futures contracts.

In **forward/future contracts**, the parties enter into a mutually binding agreement to purchase or sell the underlying asset at a pre-agreed price and with delivery or other execution of the agreement at a specified date.

No option premium is paid in the case of forward transactions, but the agreed forward price will normally be fixed as the spot price (the current market price) of the underlying asset plus interest expense up to the settlement date of the contract. In addition, costs must be paid in connection with the trading and administration of the forward contract.

In forward trading, the **buyer has** assumed the entire price risk of the underlying asset. If the price falls, a loss occurs equal to the difference between the value of the underlying asset and the forward price. If the price rises, a gain equal to the difference between the value of the underlying asset and the forward price occurs. In addition to the price risk, the buyer has a credit risk that the seller delivers the agreed asset on the settlement date.

A **seller who owns the** underlying asset has no payable risk associated with price developments, but loses appreciation in value in excess of the agreed forward price. The seller has a credit risk that the buyer can settle the agreed amount on the settlement date.

If the **seller does not own the** underlying asset, he has, in principle, an unlimited loss potential in the event of a price rise. The loss is calculated as the value of the underlying asset minus the agreed forward price. Similarly, in the event of a price fall, the seller has a profit potential that is calculated as the forward price minus the value of the underlying asset. The seller also has a credit risk that the buyer can settle the agreed amount on the settlement date.

A forward/futures contract is a generic term for instruments with different clearing and settlement mechanisms, but with the same risk profile. Contracts to be settled with physical delivery of the underlying financial instrument are often called forwards, while contracts to be settled on the settlement date with a settlement in money are called futures.

The provision of collateral for futures is intended to hedge against future fluctuations in price of the underlying asset. Traditionally, the intermediary or settlement agent has not provided collateral for such contracts, but only demanded collateral from his customers, but the requirement for mutual collateral is now increasing.

In the case of futures, it is common to also make a daily settlement based on price developments from the previous trading day in addition to the provision of collateral.

1.5.5. Contracts For Difference (CFD)

Today, standardised futures with individual stocks or indices as underlying instruments are often sold under the CFD name. The sellers of a CFD often require a low collateral margin, allowing for a large market exposure using little money.

The Contract for Difference entails high risk. It is possible to lose more than the initial deposit. Prices may move rapidly in the opposite direction to what was expected, and losses may result in additional margin deposits. Under certain market conditions, it may be difficult or impossible to close a position. This can occur, for example, when the price of an underlying instrument rises or falls so rapidly that the trade in the underlying instrument is restricted or closed.

The risk associated with such low safety margins is also that the issuer will be able to close the position immediately, also during the day, if the value of the collateral falls below the margin requirement. The customer is often given very short deadlines to fill up with more collateral, and rapid fluctuations can cause the issuer (according to the agreement) to close the position contrary to the customer's wishes.

The value of investments in CFDs with underlying instruments listed in foreign currencies may also vary due to the change in the exchange rate.

CFDs are a complex investment product and involve very high risk. The probability of loss is high. Finanstilsynet therefore warns retail clients against investing in such products.

The client must ensure that he fully understands the risks involved and, if necessary, seek independent advice. The client must ensure that the amount invested is not a larger proportion of the total portfolio of the client than that the client can absorb a loss of the entire amount invested, and in some cases more than the amount invested.

1.5.6. Swap agreement

A **swap agreement** is a contract where the parties agree to make payments to each other on an ongoing basis, for example calculated on a fixed or a floating interest rate (interest rate swap), or at a certain point swap one or more assets with each other, for example different types of currencies (currency swap).

1.6. Standardised and non-standard derivative instruments

Derivative instruments are traded in standardised and non-standard forms.

Trading in **standardised** derivative instruments takes place on regulated markets and follows agreements and terms, which are standardised by an exchange or clearing organisation. In the Norwegian derivatives market, for example, Oslo Børs offers trading in standardised options and futures. Derivatives with Norwegian equities as underlying are also traded on other marketplaces, including Nasdaq OMX.

Trading in foreign standardised derivative instruments normally follows the rules and conditions of the country in which exchange trading and clearing are organised. It is important to note that these foreign rules and conditions do not have to coincide with those that apply in Norway.

Some investment firms offer derivative instruments that are not traded on regulated markets. Such derivative instruments are referred to as **non-standard** derivative instruments (OTC derivatives). Anyone wishing to trade in this type of derivative instrument should particularly carefully familiarise themselves with the agreements and terms and conditions governing their trading.

1.7. Clearing

When clearing derivatives, a clearing agent acts as counterparty between the investment firms representing the buyer and seller of derivative contracts and guarantees that investment firms receive settlement of the contract. The clearing agent acts as a seller against buying investment firms and as a buyer against selling investment firms. In the standardised derivatives market, licensed derivative contracts are often cleared by a central counterparty (CCP). In the OTC market, investment firms tend to play this role.

The way CCPs work today, they provide no direct protection to the end investor. In both CCP-cleared trades and OTC trades, the investor has a risk on his investment firm to fulfil the contract.

Investors who do not want risk on their investment firm can enter into an agreement for a segregated account in the clearing house. Such a solution requires a separate contractual framework and entails increased costs, and is best suited for larger institutional investors.

2. Short trading

"Short trading" means selling financial instruments that one does not own. Under Norwegian law, uncovered short selling is prohibited, so that anyone selling short must borrow the financial instruments from the investment firm or otherwise secure access to the instruments on the settlement date. At the same time, the borrower commits to return to the lender instruments of the same kind at a later agreed date.

Short trading is often used as an investment strategy when the financial instrument is expected to decline in value. At the time of sale, the borrower expects to be able to purchase the borrowed instruments at a lower price at the time of return than the price at which they were sold. **Should the price instead rise, a loss will occur, which in the event of a sharp rise in prices may be significant.**

Agreements on loans of financial instruments often contain provisions stating that the lender may at any time demand return with a two-three days deadline. This increases the risk associated with short selling.

3. Sustainability reporting, financial analysis and possible pricing effects

Over the past ten years, sustainability has received increasing focus in financial markets. European authorities have a stated goal that a larger share of private capital should be channelled towards sustainable companies and projects.

To achieve this, the EU has introduced a number of laws aimed at reporting sustainability effects by companies, both listed and large private. The aim is for such reporting to put financial market participants in a better position to price this information into risk and return assessments, and it is expected that this will contribute to private capital increasingly finding its way to companies and activities that contribute to environmental and sustainability goals.

To speed up the process of channelling private capital towards sustainable businesses and activities, the EU has also introduced a law requiring financial advisers and portfolio managers to explicitly ask investor clients whether they have this type of goal with their investments, and if so, what proportion of their portfolio should be allocated to each target.

In order to answer such questions, investors must be provided with information of sufficient clarity and depth to ensure that the decision is rational and of good quality. This paper aims to clarify important factors in this context.

3.1. Securities pricing and the effect of sustainability elements on expected returns

In order to understand risk and return in the securities market, it is uncontroversial to assume that financial markets are characterised by high competition. Investors and other stakeholders try to acquire and analyse information that could give them an economic advantage. An investor will take into account the expected return that could be obtained by holding a broad index portfolio and set a required rate of return for each individual company or project relative to this. For markets to function as smoothly as possible, it is important that relevant information about companies' future profitability and the risk associated with their operations is available.

Over many decades, accounting standards globally have evolved, ensuring that financial information from firms is relatively homogeneous and thereby comparable. There are different requirements for which accounting standard an enterprise should use, but regardless of which standard applies, the methods used to report accounting figures are specified, and an external user of accounting data should be able to trust that an accounting report provides a correct picture of the company's historical profitability and financial position.

These financial reports form the basis for the future assessments made by financial market participants such as analysts and investors when estimating future profitability and risk, and which thereby form the basis for the relevant pricing of the security.

In addition to accounting information, an investor will also base his decision on other, non-financial information. Such non-financial information is generally far less quantifiable and standardised and is thus inherently less objective.

Sustainability information from a company will be non-financial information that comes in addition to financial reporting. With higher requirements for the scope and frequency of reporting of sustainability information by the EU and other authorities, the aim is that when this information becomes available, rational financial market participants will incorporate this into their assessments of return potential and risk.

Sustainability reporting from the business sector has historically been poorly standardised and formal, even though many companies have used reporting guidelines from international organisations. With new legislation, such as the European taxonomy, some companies will now report using a more stringent template and, in some areas, more quantitative. Nevertheless, much of this information will remain qualitative and to some extent subjective.

In any case, market participants such as financial analysts and investors will gradually incorporate this information into their assessments. Rational operators will, for example, make decisions that some securities may appear mispriced because sustainability elements around the company are undervalued. A key issue on the part of the authorities is 'stranded assets', which describes a situation where a company's assets generate sufficient cash flow today to justify their balance sheet value, while in the future they may be worthless due to sustainability changes.

The important thing is that sustainability reporting provides more information about the business of the companies. The outcome of this incorporation of sustainability information is thus transparent in relation to the pricing of the security and thereby return potential and unsystematic risk. A security that is priced highly, but where the company seems well positioned on sustainability, is not necessarily an investment with a good expected return. Conversely, a company in a sector with a high expected need for restructuring is not necessarily an investment with weak return opportunities.

Better and more standardised sustainability information from companies will improve financial markets' ability to assess future profitability and risk, but it is not given how this will affect the pricing of individual financial instruments and thereby the return potential. Investors must decide on this based on the available information.

Sustainability reporting is thus not included as a separate assessment of an investment, but rather as an integral part of the information pool that ensures the right pricing of the security in the market over time.

3.2. Reporting from enterprises

There are already significant information that companies report as non-financial information, and 'sustainability reports' have become common. Several agencies and consultants regularly assess the quality of the actual reporting. These assessments are mainly based on three criteria:

1. The extent to which the company reports in accordance with recognised voluntary international standards.
2. Whether the company quantifies greenhouse gas emissions.
3. Whether the company has goals for improvement and whether progress is reported.

These assessments of the quality of reporting do not say anything about how 'environmentally friendly' or sustainable the company is. This concerns only the quality of reporting.

Other consultants and agencies go further and make a concrete assessment of the sustainability of the company. These use the information reported by the enterprise together with its own models and expertise and combine this into a score, for example on 'greenness'. It is important to assume that this type of assessment, in the same way as other analyses, depends on occasionally subjective data from the companies and the consultant's own assessments. Therefore, it is to be expected that there may be differences in perceptions of how sustainable the same company is between the different consultants. This is also what has been observed in studies conducted in this area; The same company can get very different scores from different consultants.

This is a situation that can be expected to persist in the future. Investors cannot therefore indiscriminately base their assessment on a score from an individual consultant.

The safest thing for an investor is to make independent assessments of non-financial information as an integral part of the analysis, as described in the previous section.

3.3. Channelling private capital towards sustainable enterprises

It is a stated goal of politicians in the EU that more private capital should be channelled towards sustainable investments. Financial advisers and portfolio managers should thereby ask their investor clients whether they have sustainability preferences. In the event of a positive response, they will also ask a number of detailed questions about the type of sustainability preferences investors have, as well as whether there are targets for shares of the total portfolio that want to invest in line with the different preferences.

Given the description above of the unquantifiable quality of the data on which this type of assessment is based, and the uncertainty of how this categorisation affects return and risk assessments, we encourage investors to make independent assessments of this type of information for the individual investment and to be cautious about investing based on simple categorisation.

3.4. Conclusion

Pricing securities is complicated. Return and risk go together. Sustainability information is valuable input in financial analyses and over time the companies that are best adapted to future requirements and customer demand will provide the best return to investors. In this sense, sustainability elements are an integral part of financial analysis.

Allocation of investments in a securities portfolio based on sustainability parameters can work, but then only as a starting point. All individual investments must be carefully evaluated based on risk and return potential and with a realistic view of the direction causal relationships are heading.

4. Trading Frequency and Costs

The more frequent the trade, the higher the transaction costs will be, as costs are normally incurred on each individual trade (buy or sell). If commission costs over time exceed the return, this will result in a loss for the customer. It should be emphasised that commission costs are also incurred for debt-financed trading.

Securities trading incurs commission costs that normally increase proportionally to the size of the trade made. For example, if the customer sells shares worth NOK 50,000 and the commission rate is, for example, 0.2%, the sale costs NOK 100. If, on the other hand, shares are sold for 500,000, the commission cost will be NOK 1,000. It also operates with minimum commission rates, so that the sale or purchase of securities for a smaller amount may be more expensive in percentage terms than when selling/buying for a larger amount.

5. Debt-financed trading

Financial instruments can in many cases be purchased for partially borrowed capital. Since both own paid-in capital and borrowed capital affect the return, the customer can obtain a greater gain through debt financing if the investment develops positively compared to an investment that is only made with their own paid-in capital. The debt related to borrowed capital is not affected by changes in prices for the purchased instruments in a positive or negative direction, which is an advantage in the event of a positive price movement. However, if the price of the purchased instruments moves in a negative direction, this entails a similar disadvantage as the debt remains unchanged. **In the event of a fall in share prices, the own paid-in capital may therefore be wholly or partly lost, while the debt must be fully or partly paid through sales revenues from the financial instruments that have fallen in value. The debt must also be paid even if the sale proceeds do not cover the entire debt.**

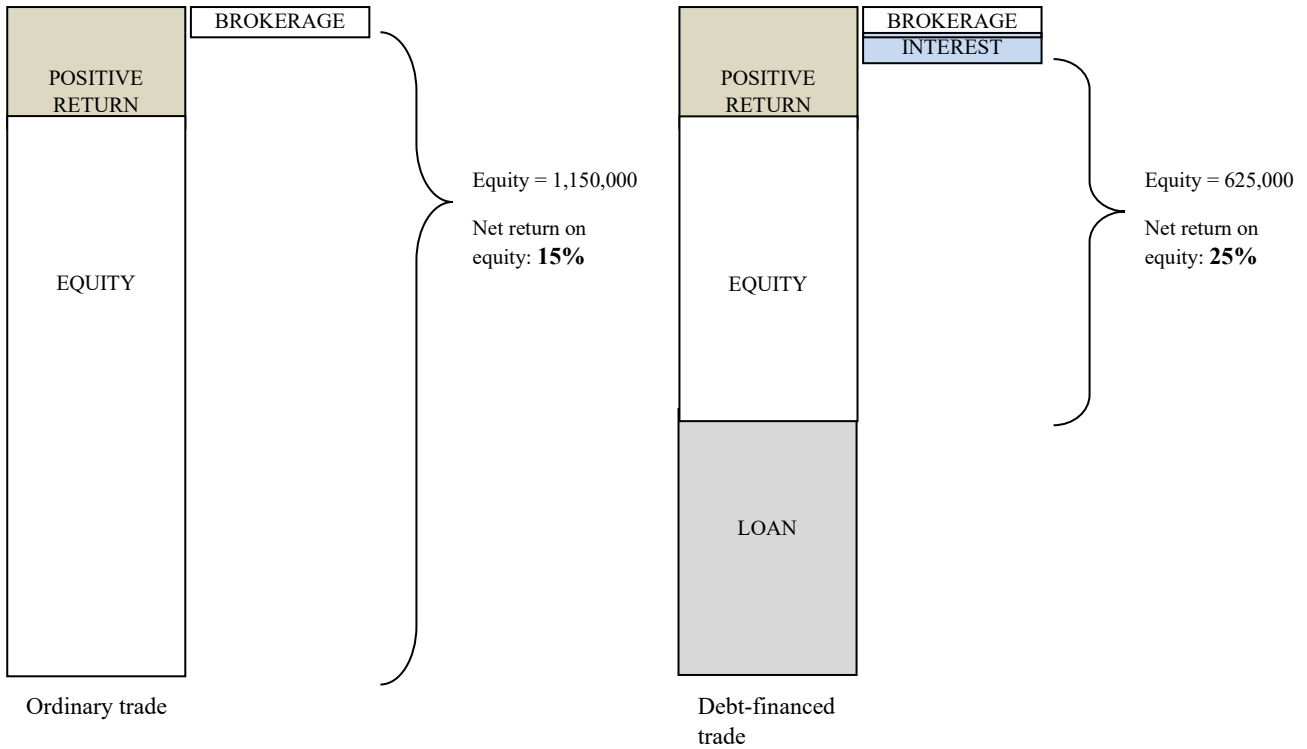
The risk associated with debt-financed equity purchases increases with the degree of debt financing. For example, a portfolio with 80% debt financing would lose all equity if prices fall by 20%. If the portfolio is 60% debt-financed, equity will be lost as a result of a price fall of 40%.

The return on equity in a partially debt-financed portfolio will fluctuate more than in a corresponding equity-financed portfolio, and only when the return on investments is higher than the borrowing rate will debt financing generate an excess return.

An illustration of a positive return in the case of partial debt financing is provided below.
Assumptions:

- 20% positive return

- NOK 1,000,000 invested in the market
- 5% brokerage (20 transactions each with a brokerage fee of 0.25%)
- 5% interest expense
- 50% debt financing



An illustration of a negative return in the case of partial debt financing is provided below. Assumptions:

- As above, but a 20% negative return

