

CFD Trading Strategies

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Program

- How to use CFDs?
- Speculation - capital requirement
- Speculation - increased diversification
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SAXO  CFDs

How to use CFDs?

- CFDs are a very dynamic instrument which allow you to do the following:
 - Speculation with less capital requirement (geared positions - **higher risk**)
 - Speculation with increased diversification possibilities (**less risk**)
 - Hedging of stock portfolios (one-to-one method - **less risk**)
 - Hedging of stock portfolio (index-method/ β hedging - **less risk**)
 - Pair Trades (Spread betting / market neutral - **less risk**)
 - Replace traditional derivatives trading (options/warrants - **less risk**)

Speculation Vs capital requirement

- Normally the most frequent use among Saxo clients
- Will enable greater market exposure than what your capital normally would allow.
- Ex: Let's say that you buy 100 Ericsson CFDs @ SEK 25.40 for a nominal position of SEK 2,540 requiring a margin of SEK 254. A few days later, you sell your position @ SEK 26.

Total profit: $(26 - 25.40) * 100 = \text{SEK } 60$

Total RoC: $60 / 254 = 23.6\%$

RoC if done with stocks: $60 / 2540 = 2.36\%$

- **NOTE:** To use full gearing possibility on account and hence, exposing one for extreme risks!

Speculation - increased diversification

- Enables investors to use the gearing possibilities in a more sophisticated manner.
- A method to use the gearing potential for risk decreasing effects.
- Assume you want to invest £5,000 and you think that Vodafone looks like a good deal. How could you use CFDs on Vodafone to decrease your risk?

Instead of buying Vodafone stocks for £5,000 you can buy Vodafone CFDs for £5,000 market exposure, requiring a margin of £250. This means that you can do one of the following with the remaining £4,750 to decrease your risk:

- Invest the remaining £4,750 in other CFDs / stocks (normal risk/return perspective)
- Short X number of FTSE 100 indices (Index hedge)
- Short X number of British Telecom CFDs (Pair Trade Market Neutral Hedge)

And as an extra add-on you **MINIMIZE** currency risk!

Hedging of Stock Portfolios (one-to-one)

- Imagine you are currently long in 10,000 Ericsson shares on OMX Stockholm. You expect the stock to perform badly short-term, due to some legal issues in China. However, long-term you believe it is a sound investment. The stock was traded at SEK 22.10 when you purchased it and is currently trading at SEK 26.05. You expect the stock to start picking up in value from SEK 23.50. How can you protect yourself from this adverse movement while waiting for the up-turn from SEK 23.50?
 - Option 1; You sell the entire share holding in Ericsson at 26.05 for a taxable profit of $(26.05 - 22.10) \times 10,000 = \text{SEK } 39,500$. As a Swedish investor you will have **SEK 248,650** to buy Ericsson again when the price reaches 23.50 ($260,500 - (39,500 \times 0.3)$), **enabling you to purchase 10,580 Ericsson shares**. You will pay SEK 11,850 in tax on your profits from the initial sale.
 - Option 2; As an alternative you could short 10,000 Ericsson CFDs at 26.05, using the 60% collateral value of your Ericsson share position making sure you do not have to use any fresh capital. At 23.50 you close your CFD position for a taxable profit of SEK 25,500. The loss on your stock position is of the same amount. You will now have a cash position of SEK 17,850 ($25,500 \times 0.7$) and a stock position of SEK 235,000 ($10,000 \times 23.50$), **giving a combined value of SEK 252,850**. If you wish to reinvest profits in Ericsson, **Option 2 enables you to hold 10,760 Ericsson shares from 23.50**.

Hedging of Stock Portfolios (one-to-one)

- However, it is important to note that there were a number of things we did not pay attention to in the preceding example.
 - We did not consider the impact of interest rates, something that works in the CFD hedgers favour.
 - We did not consider impact of commission fees.
 - If Ericsson did have a dividend payout during the holding period of the short CFD hedge, the hedger would have lost out due to tax reasons (paying dividend before tax and receiving dividends after tax).
- Most importantly; In theory CFDs offer a **perfect hedge**, in practice however, taxes will have an impact on the efficiency of the hedge.
- There will always be reasons to why investors don't want to sell off a position in stocks!
- Nonetheless, CFDs offer great opportunities for hedging purposes on a general scale. In some countries it might even be more favourable from a tax perspective due to local differences for taxation rules for CFDs! *(CFD gains are tax exempt in the UK)*

Hedging of Stock Portfolios (index/ β)

- Beta (β) is basically a measure of a stock (or portfolios) volatility in relation to a reference market, such as S&P500, DAX30 or CAC40. It is calculated by conducting a regression analysis of rate of returns.
- Beta for AP Møller compared to OMX Copenhagen over the last 1,5 year could for example give a beta value of 1.7.
- This means that when the market moves with 1% in either direction, AP Møller moves in the same direction with 1.7%.
- Beta is calculated by:
$$\beta_a = \frac{\text{Cov}(r_a, r_p)}{\text{Var}(r_p)}$$
- It can be used to calculate expected returns on a portfolio:
$$K_E = R_F + \beta_E(R_M - R_F)$$

Hedging of Stock Portfolios (index/ β)

Aktie	Branche	Antal aktier	Kurs	Valuta	Værdi	Valuta kurs vs. EUR	Værdi i EUR	Beta vs. DAX	Beta værdi
Novo Nordisk	Medicinal	1000	314	DKK	314000	7,435	42232,68	0,19	8024,21
Nordea	Bank	5000	56,5	DKK	282500	7,435	37995,97	0,6	22797,58
Microsoft	Software	1500	25	USD	37500	1,2286	30522,55	0,61	18618,75
AstraZeneca	Medicinal	25	2270	GBP	56750	1,4902	84568,85	0,32	27062,03
Deutsche Telecom	Telecom	3000	15	EUR	45000	1	45000,00	0,65	29250,00
Renault	Consumer goods	750	71	EUR	53250	1	53250,00	0,99	52717,50
Intel	Hardware	2000	27	USD	54000	1,2286	43952,47	1,01	44391,99
E.ON	Energy	1000	70	EUR	70000	1	70000,00	0,59	41300,00
Maersk B	Energy	10	57000	DKK	570000	7,435	76664,43	0,47	36032,28
Portefølje værdi							484 186,94		280 194,34

- In order to determine the number of DAX CFDs one should short in order to have a beta neutral hedge, just divide the EUR exposure compared to DAX and divide it with the current price of the DAX CFD. Assume that DAX is at EUR 7,194.
- In this case, it is 39 DAX CFDs that should be shorted ($280,194.34/7,194=38.95$) in order to produce a beta neutral portfolio.

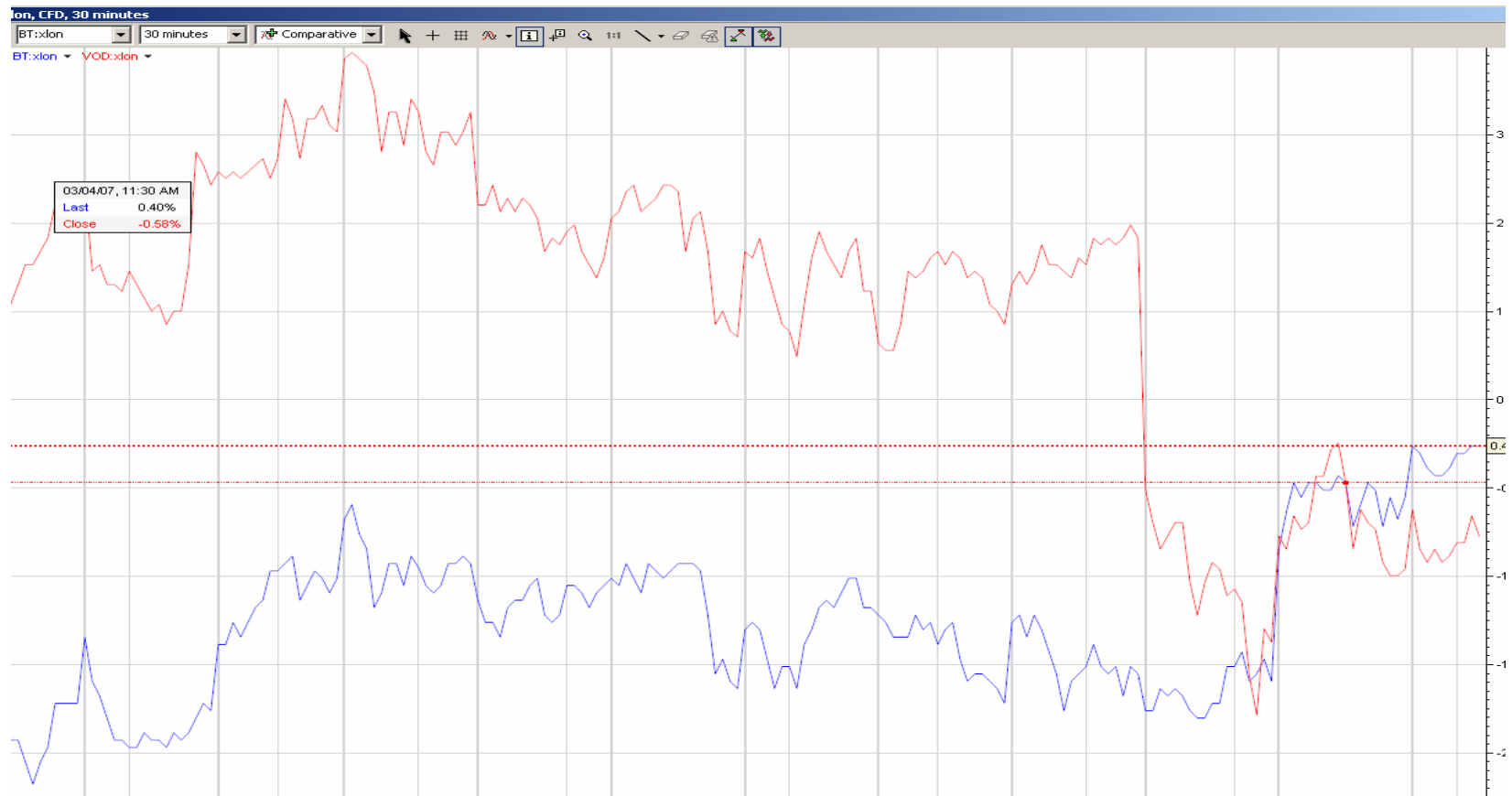
CFDs on Indices

- Today we have 11 different stock indices that we offer to our clients:
 - S&P 500 (US - 500 Large Cap stocks trading on US exchanges, incl 11 foreign firms)
 - NASDAQ 100 (US - 100 largest domestic and international non-financial companies listed on Nasdaq)
 - Dow Jones Industrial Average (US - 30 of the largest and most widely held public companies)
 - FTSE 100 (London Stock Exchange)
 - DAX 30 (Frankfurt Stock Exchange)
 - CAC 40 (Paris Stock Exchange)
 - SMI (Swiss Market Index)
 - OMX (Stockholm Stock Exchange)
 - ASX S&P 200 (Australian Stock Exchange)
 - Nikkei 225
 - Dow Jones Euro STOXX 50 Index (Europe - "Super sector" leaders in the Euro zone)
- There is not a cash market for indices, so the price is established by Saxo Bank (OTC product)
- The price of the CFD index tracker is calculated as the front month future (30 days) in the tracked index less the spread basis. **Spread basis:** The spot futures price less the spot index price

Pair Trades

- Pair Trade is a simple concept to grasp.
- You simply chose one firm ahead of another, for example Nokia ahead of Ericsson.
- You trade the price difference between two securities in the same industry and that the difference will increase/decrease.
- Good sector risk hedge but leaves firm specific risk unhedged!
- Example: Buy £25,000 BT and short £25,000 Vodafone - enables you to make money even though the stock market performs badly (FTSE100 decreases in value).

Pair Trades (cont)



Pair Trades (cont)

- We buy £25,000 BT and short £25,000 VOD. The position is reversed after 6 trading days and gives us the following cash flows:

- Day 1; Buy (Long) 7,889 BT:xlon @ 316.908p	Total value:	£25,000
- Day 1; Sell (Short) 16,759 VOD:xlon @ 149.175p	Total value:	£25,000
- Day 6; Sell (closed) 7,889 BT:xlon @ 322.180p	Total value:	£25,416
- Day 6; Buy (closed) 16,759 VOD:xlon @ 150.350p	Total value:	£25,197
- Net profit on CFD Spread Trade:		
- Profit on BT:xlon trade((7,889*(322.180-316.908)) =		£415,91
- Loss on VOD:xlon trade((5000*(150.35-149.175)) =		(£196,92)
- Interest rate: (-34.11 (pay on long)+11.51 (receive on short)) =		(£ 22,60)

- Net profit:** £196,39

Pair Trade Hedge

- Ex: You have a position in Renault, which you think is generally cheap according to the competitors in the car industry.
- Volkswagen looks very expensive, according to the sector.
- You are nervous that the car industry as a whole will decrease, as consumer confidence is dropping in EU and gasoline prices are rising.
- **What to do?**
- Instead of selling the Renault share we hold, we chose to neutralize the risk in the sector by selling the same beta value in Volkswagen.
 - Renault: 750 shares with total beta exposure against DAX=EUR 52.717,50
 - Sell the no of CFDs in Volkswagen that gives us the same beta exposure against DAX.
 - Volkswagen beta is 1,05 and share price is 37.23.
 - Therefore, we will sell 1,490 Volkswagen CFDs $(52.717,50 / (37,23 / 1,05)) = 1,489.80$

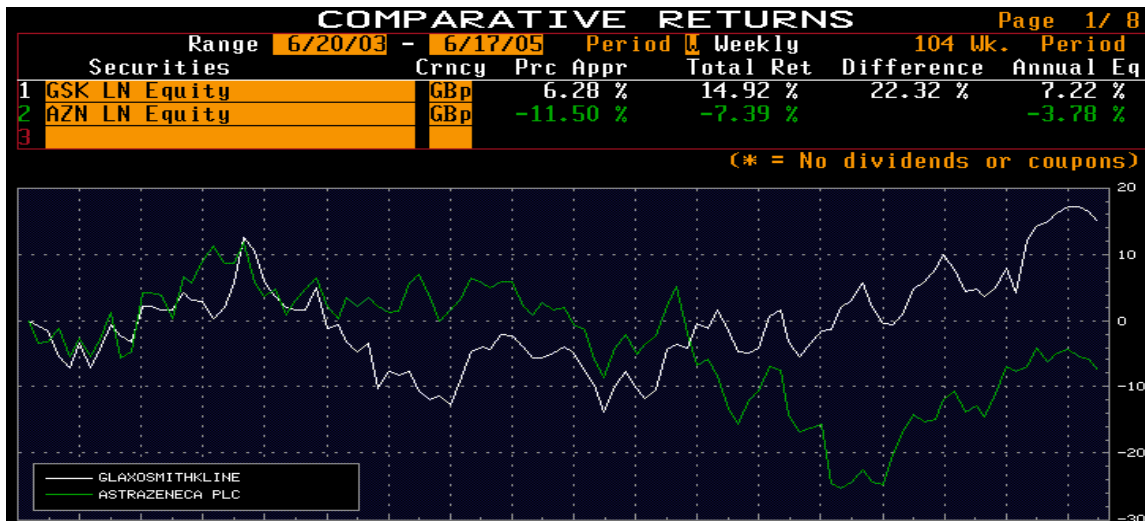
Pair Trade Arbitrage

- PEG ratio (Profit Earnings Growth)
 - How much you pay for a Stocks future earning growth.
 - Fair valued when PEG is 1, over 1 is "over-valued and under 1 is cheap
 - (P/E divided with est. 5 year earning growth)
 - Bull Market : PEG 1,5 is cheap, PEG 2,5 is expensive
 - Bear Market: PEG below 0,5 is cheap, above 1,5 is expensive

$$P/E \text{ ratio} = \frac{\text{Price per Share}}{\text{Earnings per Share}}$$

$$\left(\frac{P/E}{\text{Growth}} \right)$$

- PEG ratio for GlaxoSmithKline and AstraZeneca is 9.86 and 1.20. Glaxo looks expensive compared to AstraZeneca. Your strategy will hence be to sell Glaxo and buy Astra.



Alternative Derivatives Trading

- Most option or warrant traders are trading the stock derivative due to gearing possibilities.
- Very few investors realise that trading the equity markets through derivatives this is not the most efficient way to do it.
- Why?
- An option/warrant is priced from 5 different variables, namely interest rate, option strike price, current price of underlying, time to expiry and finally the volatility in the market.
- Therefore, an option trader interested in the direction of the price of the underlying can have a very unpleasant surprise if the other parameters goes against him and his option position, which is where CFD's really show their strength.
- Specifically option prices are affected by the following parameters in the following manner (parameter increasing while other remains constant):

Alternative Derivatives Trading

Variable	Call	Put
Stock Price	+	-
Strike Price	-	+
Time to expiration	+	+
Volatility	+	+
Risk-free rate	+	-

- Unless you are an option trader willing to speculate in volatility, which is the one with the most impact on option prices, together with underlying stock price and time to expiration, options are not a good way to speculate on stock prices.

Alternative Derivatives Trading

- Therefore, unless you are a vol trader, a trader speculating on which direction volatility will go, a CFD offers the following benefits compared to an option/warrant:
 - No impact from volatility, time, or strike price measures on your CFD position.
 - No expiration date.
 - No premium, just commission of 0.1%
 - More transparent P/L, easier to follow whether you are making money or not.
- Drawbacks on trading CFDs vs options would be:
 - If you are a vol trader, CFDs is not for you.
 - Not the same gearing effect, even though premium on options are a “sunk” cost.
- However, most importantly, CFDs are less risky than Stock Options when using stop-loss orders on your CFD position, i.e. less factors affecting your position value!

Questions?