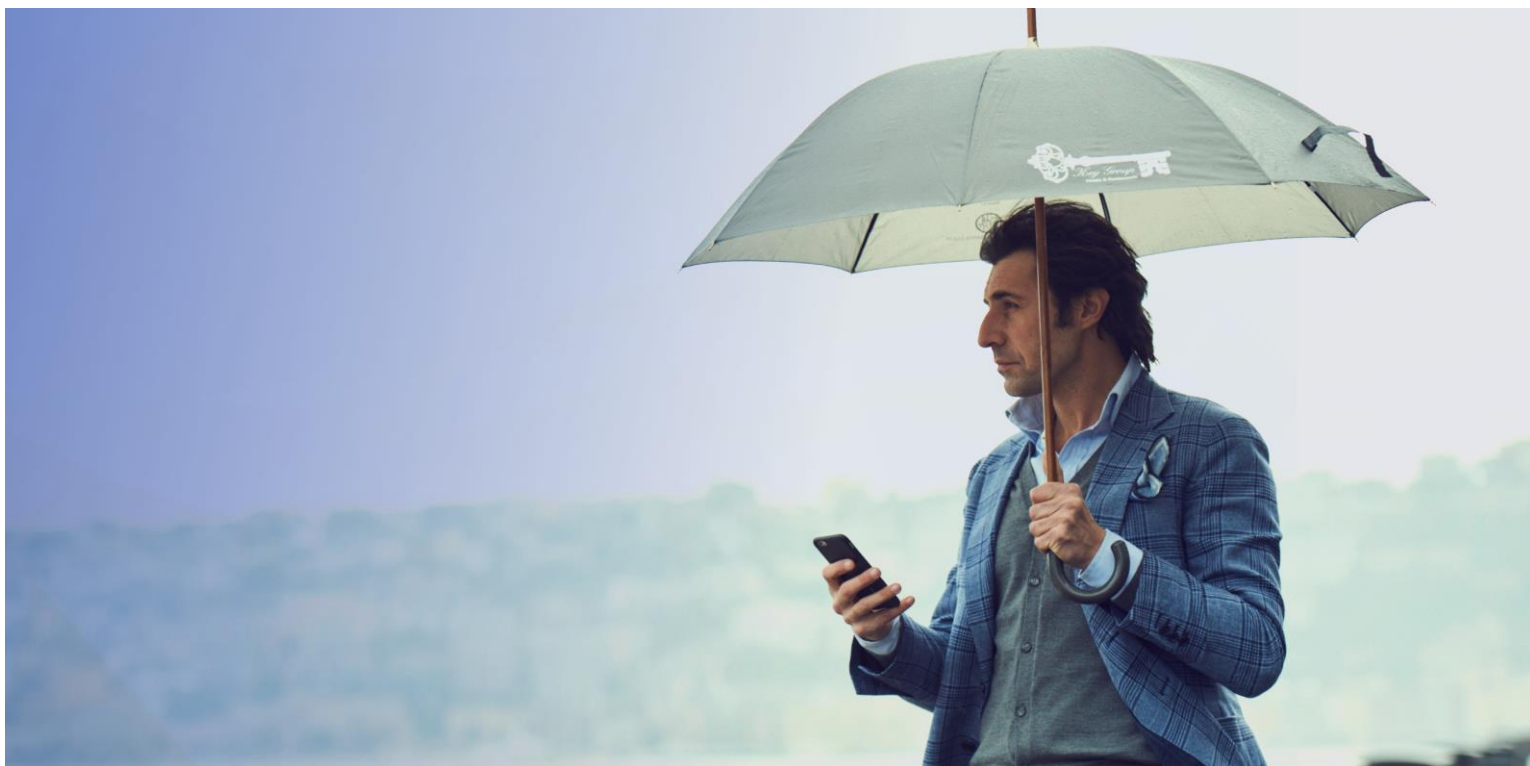




FX VANILLA OPTIONS PRODUCT GUIDE



WHY TRADE FX OPTIONS WITH SAXO

- A global online investment bank regulated in the EU, headquartered in Copenhagen and operating in financial centres around the world including London, Singapore, Paris, Zurich, Dubai and Tokyo.
- A recognised market maker, providing access to deep pools of liquidity and competitive pricing
- Plain vanilla calls and puts in 40 currency pairs, with European-style expiry
- Streaming prices with high thresholds for automatic execution
- Fully flexible choice of strikes with maturities from 1 day to 12 months
- Sophisticated margin calculation method
- Automatic exercise of in-the-money (ITM) options with a choice of exercise method; spot or cash
- FX Options Board for easier price discovery
- FX Options Reports, for a combined analysis of a spot and options portfolio

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1 INTRODUCTION

Saxo's proposition to the FX options trader is truly unique given the quality of the analytics provided, the depth of the product offering, and the level of service available. Saxo provides access to a superior grade of trading capabilities that affords the client maximum flexibility to implement trading strategies and market views.

FX options can be used to express a view on the underlying market; this may be a directional play on a currency pair moving higher or lower, or to take a view on future volatility. FX options can also provide the certainty that existing FX positions are fully hedged at a guaranteed price, whilst also benefitting from participation in favourable market movements depending on what happens to the spot price over the life of the option. FX options provide more alternatives in relation to controlling risk, and can be used as a viable alternative to using a stop loss order.

With the vast majority of FX option volume being executed outside of traditional exchanges, the FX options market is said to be an over-the-counter (OTC) market. Saxo is a recognised market maker, providing its clients with access to deep pools of liquidity and competitive pricing.

Saxo offers full electronic access to trade Vanilla and Binary touch options with maturities from 1 day to 12 months. FX Vanilla options at Saxo are European-style options, meaning that in-the-money options can only be exercised on the expiry date and cut at 10.00 Eastern Standard Time (New York cut).

2 FX OPTION DEFINITIONS

2.1 BUYER (HOLDER)

The buyer (holder) has the right, but not the obligation, to buy (in the case of a call) or sell (in the case of a put) currencies at a specified price (the strike price) on a specified date in the future (the expiry date). After the expiry date the option ceases to exist.

2.2 SELLER (WRITER)

The seller (writer) is obliged to sell (in the case of a call) or buy (in the case of a put) currencies to (or from) the buyer (holder) at the specified price upon the buyer's request.

	BUYER (HOLDER)	SELLER (WRITER)
CALL OPTION	RIGHT TO BUY	OBLIGATION TO SELL
PUT OPTION	RIGHT TO SELL	OBLIGATION TO BUY

2.3 STRIKE PRICE

The strike price, also known as the exercise price, is a specified price at which to exercise an option.

2.4 EXPIRY DATE

An option expires at a specified date and time in the future.

2.5 OPTION STYLE

- European style: can only be exercised on the expiry date
- American style: can be exercised at any time up to the expiry date

2.6 PREMIUM

The premium is the cost of the option. It is the fee paid by the option buyer (holder) to the option seller (writer).

2.7 MONEYNES

Moneyness describes the relationship between an option strike price and the spot price:

- A call is considered;
 - In-the-money (ITM), when the strike price is less than the spot price
 - At-the-money (ATM), when the strike price is equal to the spot price
 - Out-the-money (OTM), when the strike price is greater than the spot price
- A put is considered;
 - In-the-money (ITM), when the strike price is greater than the spot price
 - At-the-money (ATM), when the strike price is equal to the spot price
 - Out-the-money (OTM), when the strike price is less than the spot price



3 THE BENEFITS OF TRADING FX OPTIONS

- Express a view on the underlying spot price moving higher, lower or sideways, or to take a view on future volatility
- Downside risk is limited to the option premium (the amount paid to buy an option)
- Participation in favourable market movements, for limited risk
- Flexibility in choosing the strike price and the expiry date
- Certainty that existing FX positions can be fully hedged at a guaranteed price
- Can be used as a viable alternative to a Stop Loss order

4 PRODUCT OVERVIEW

4.1 TRADE TICKET

Saxo has designed an industry-leading trade ticket that provides access to all of the relevant information required to facilitate the trading decisions of an FX options trader.

Whilst this information is essential, traders need to be able to compare different option strikes and maturities in order to find the best value for their trade ideas. For this reason, Saxo developed its unique FX Options Board to help facilitate the process of price discovery. The FX Options Board is described later in this guide.

Parameters for the option are set in the Trade Ticket

EURUSD - Forex Options Trade

Account: TRIAL_204222

Instrument: EURUSD
Forex Vanilla Options: Euro/US Dollar

Trade | Order | Option

Amount: 500,000

Expiry: 03-Jan-2014

Type: Vanilla Call

Strike: 1.3560

Bid: 0.0100 (Sell)

Ask: 0.0116 (Buy)

Exercise method: Spot

☐ Open 'Delta Hedge' dialog after trade

Value date: 08-Jan-2014

Margin

Impact (buy): -1,139.12 USD

Impact (sell): 6,089.34 USD

Market Rates and Greeks

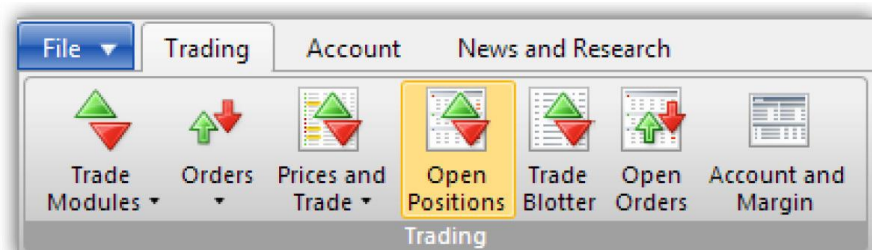
Mid spot:	1.3559
Mid forward:	1.3559
Mid volatility:	7.00 %
Delta:	264,782 EUR
Gamma:	99,376 EUR
Theta:	-90 USD
Vega:	775 USD

Green prices are firm tradable prices offered by Saxo Bank

Prices and risk information is readily available

4.2 MONITORING OPEN POSITIONS

Once a trade has been executed, the parameters of the position are updated in real time. Clients are able to view the details of their positions by opening the Open Positions module, and clicking on the icon highlighted below in the Open Positions monitor.



Positions

Look for: Filter ☐ Account: All ☐ Show square/closed

Instrument	Option Type	Call/Put	Strike	Expiry	Status	L/S	Amount	Open	Close	P/L	P/L (USD)	% Price
Forex Vanilla Options (1)												
EURUSD	Vanilla Call	Call	1.3655	06-Jan-2014	Open	Long	100,000	0.0112	0.0097	-150 USD	-150	-13.39

Position: EURUSD - Euro/US Dollar

Long Call: 1,000,000

Strike price: 1.3655

Expiry date: 06-Jan-2014

Profit/Loss:

Open price: 0.0112

Current price: 0.0097 (-13.39 %) ▲

Total P/L: -1,500.00 USD

Details:

Position ID: 526674793

Account: TRIAL_1_204222 (USD)

Status: Open

Execution time: 06-Dec-2013 08:50:20

Spot value date: 08-Jan-2014

Premium date: 10-Dec-2013

Expiration cut: New York

Exercise method: Spot

Greeks:

Delta: 531,276 EUR

Gamma: 207,935 EUR

Theta: -167 USD

Vega: 1,587 USD

Volatility: 6.58 %

Profit/Loss Details:

	Open	Close
Premium:	-11,200.00 USD	9,700.00 USD
Trade P/L:	-1,500.00 USD	
Costs:	0.00 USD	
Total P/L (incl. costs):	-1,500.00 USD	

Details loaded at 06-Dec-2013 08:50:41 * Values in italics are estimations.

For traders with multiple options positions, or portfolios combining FX spot and option positions, Saxo provides advanced analysis tools (FX Options Reports) which are covered later in this guide.

4.3 ELECTRONIC TRADING

One of the key features of Saxo's offering is the ability for clients to trade electronically on the most liquid strikes available at a given point in time.

Saxo streams prices continuously up to a maximum notional amount that varies according to the currency pair and its underlying liquidity and market conditions. Unlike FX spot and FX forwards that trade on an order-driven model, FX options trade on a quote-driven model where executable streaming prices are displayed in green on the SaxoTrader trading platforms.

Green pricing reflects a firm two-way price that is offered by Saxo to its clients. Trade execution on these prices is handled automatically without any manual intervention.

Auto-execution limits are displayed in the trading platforms under Trading Conditions. For example, the maximum streaming amount for EURUSD options available on the platforms is up to EUR 20,000,000 of notional on short dated options, and up to EUR 20,000,000 of notional for longer dated options.

Clients can trade an option on streaming prices no more than three times in two minutes. If the client attempts to trade an option more than three times in two minutes, then streaming prices will be automatically suspended for five minutes. The client can still Request for Quote (RFQ) during the suspension period by clicking on the 'Live Price' hyperlink as shown on the right.

Note: Auto-execution limits may be changed without notice under volatile or illiquid market conditions.

4.4 FX TRADING DESK

The FX trading desk facilitates trades where the SaxoTrader trading platforms are unable to do so. For example, if a client attempts to trade a notional amount that is greater than the maximum streaming amount, or a client wishes to trade an illiquid option, the trading desk will be able to provide a tailor-made price. Abnormally volatile or disorderly market conditions also represent another situation where the intervention of the trading desk is warranted.

4.5 ORDER TYPES AND ORDER MANAGEMENT

Clients can not place orders on FX options. All trades are executed on live prices.

EURUSD - Forex Options Trade

Repeated trade on auto quote

Account: TRIAL1_204222

Instrument: EURUSD
Forex Vanilla Options: Euro/US Dollar

Trade | Order | **Option**

Amount: 1,000,000

Expiry: 06-Jan-2014

Type: Vanilla Call

Strike: 1.3655

Bid 0.0098 [Live Price](#)

Ask 0.0114 [Live Price](#)

Exercise method: Spot

☐ Open 'Delta Hedge' dialog after trade

Value date: 08-Jan-2014

Margin

Market Rates and Greeks

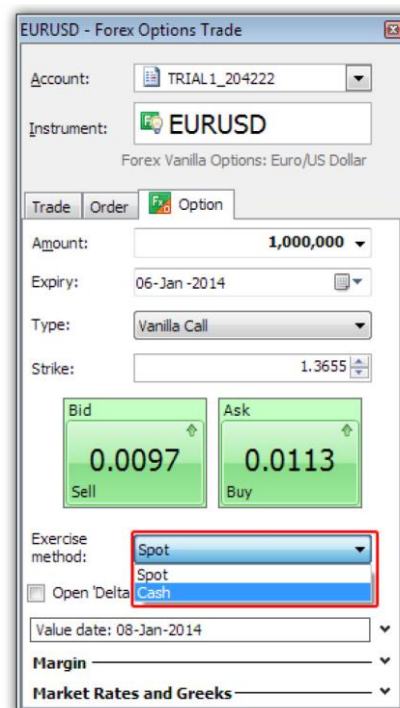
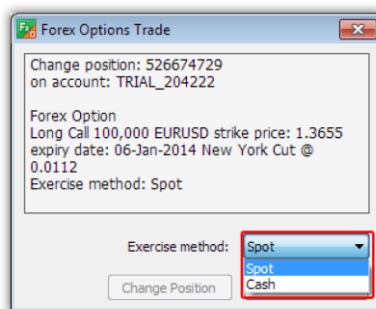
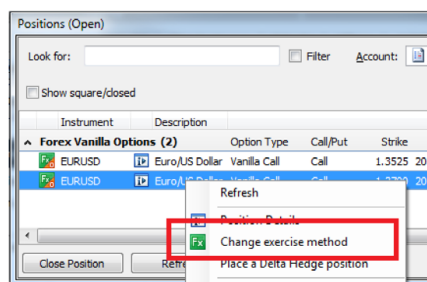
4.6 EXERCISE AND SETTLEMENT

The exercise and expiry of FX options is automatic, meaning that clients do not have to call in to manage this process. If an option is in-the-money at expiry, it will automatically settle in the pre-defined exercise method at 10.00 Eastern Standard Time (New York cut). The pre-defined exercise method means that an option can either be converted into a spot position, or simply cash settled.

The cash exercise method is in effect an automated exit of the spot position, and is executed at the mid-price. If the spot exercise method is chosen, the spot position is subject to the usual profit/loss as the spot price moves from the exercise price.

If the client already holds an offsetting position at the time of expiry, the exercised position will be netted out on the following day.

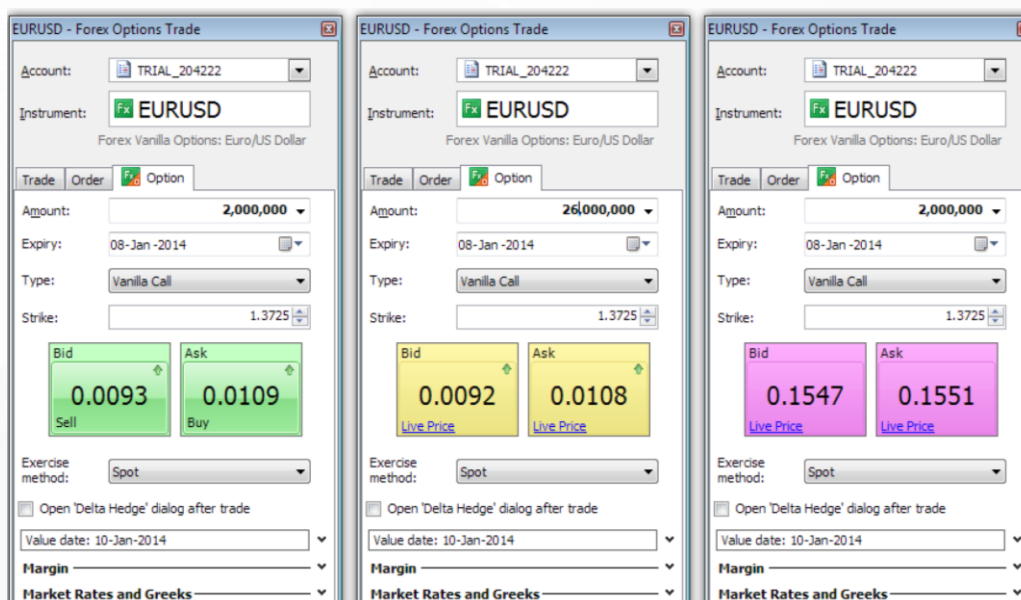
The exercise method can be amended up to one hour before expiry. In order to change the exercise method, within the the Open Positions module, right click on the position and choose 'Change exercise method' from the menu, as shown below:



4.7 COLOUR-CODED TRADE TICKET

The trade ticket is colour-coded to indicate the availability of the price on the screen:

- Green prices are available for auto-execution.
- Yellow prices are available on Request for Quote (RFQ) basis.
- Purple prices typically mean the market is closed or pricing is unreliable.



5 PRICING

The pricing model that Saxo applies for FX Vanilla options is based on the Black-Scholes model adapted for FX options (Garman-Kohlhagen).

5.1 SPREADS

The spread is defined as the distance between the bid/ask price. Spreads may vary depending on the life of the option and the currency pair.

5.2 MINIMUM TICKET FEE

Small trade sizes incur a 'Minimum Ticket Fee' of USD 10, or the currency equivalent. A small trade that attracts a minimum ticket fee is any trade that is below the 'Ticket Fee Threshold' as shown below.

5.3 MINIMUM TRADE SIZE

The minimum trade size is 10,000 units of base currency. Market orders up to 20,000,000 units of base currency (for EURUSD) will be executed automatically on live streaming prices.

Request for Quote (RFQ) on amounts above the maximum streaming amount will be executed manually by the FX trading desk.

Minimum trade sizes are as follow:

- XAU/USD: 10 Oz
- XAG/USD: 100 Oz
- NOK/SEK 50,000 NOK
- All others: 10,000 units of base currency

Note: Maximum streaming amounts are subject to change without prior notice.

FX VANILLA OPTION	TICKET FEE THRESHOLD
XAUUSD	50
XAGUSD	5,000
AUDSGD, EURCZK, EURHUF, EURPLN, EURRUB EURTRY, EURUSD, GBPAUD, GBPCAD, USDCHF, GBPJPY, GBPUSD, USDCAD, USDCHF, USDCZK, USDCHN, USDHUF, USDILS, USDJPY, USDMXN, USDPLN, USDSGD, USDTRY, USDRUB and USDZAR	50,000
AUDJPY, AUDNZD, AUDUSD, CADJPY, CHFJPY, EURAUD, EURCAD, EURCHF, EURGBP, EURJPY, EURNOK, EURNZD, EURSEK, NZDJPY, NZDUSD, USDNOK and USDSEK	100,000
NOKSEK	1,000,000

6 FX OPTIONS BOARD

In order to help facilitate the process of price discovery, Saxo has developed a unique proprietary tool called the FX Options Board. The FX Options Board displays the impact of the time value, and the level of the strike, on the premium to be paid (long position) or to be received (short position).

6.1 OPENING THE OPTIONS BOARD

File Trading Account News and Research

Trade Modules Orders Prices and Trade Open Positions Trade Blotter Open Orders Account and Margin

Prices and Trade
Forex Board
Forex Options Board

Forex Options Board

Cross: EURUSD Strategy: Vanilla Amount: 100,000 Account: TRIAL_204222

Launch Option Module

EUR Put Options (USD Pips)

15-Jan-2014	08-Jan-2014	18-Dec-2013	Strike	Strike
Sell	Buy	Sell	Buy	Strike
0.0061	0.0077	0.0048	0.0064	0.0010
Net: 0	Net: 0	Net: 0	Net: 0	Net: 0
Delta: 31 %	Delta: 29 %	Delta: 19 %	Delta: 19 %	Delta: 19 %
Mid Volatility: 6.84 %	Mid Volatility: 6.68 %	Mid Volatility: 6.97 %	Mid Volatility: 6.97 %	Mid Volatility: 6.97 %
		0.0023	0.0039	
		Net: 0	Net: 0	
		Delta: 30 %	Delta: 30 %	
		Mid Volatility: 6.82 %	Mid Volatility: 6.82 %	
0.0100	0.0116	0.0086	0.0102	0.0041
Net: 0	Net: 0	Net: 0	Net: 0	Net: 0
Delta: 45 %	Delta: 45 %	Delta: 43 %	Delta: 43 %	Delta: 43 %
Mid Volatility: 6.65 %	Mid Volatility: 6.48 %	Mid Volatility: 6.71 %	Mid Volatility: 6.71 %	Mid Volatility: 6.71 %
		0.0067	0.0083	
		Net: 0	Net: 0	
		Delta: 58 %	Delta: 58 %	
		Mid Volatility: 6.63 %	Mid Volatility: 6.63 %	
0.0153	0.0169	0.0140	0.0156	0.0100
Net: 0	Net: 0	Net: 0	Net: 0	Net: 0
Delta: 60 %	Delta: 62 %	Delta: 72 %	Delta: 72 %	Delta: 72 %
Mid Volatility: 6.55 %	Mid Volatility: 6.38 %	Mid Volatility: 6.60 %	Mid Volatility: 6.60 %	Mid Volatility: 6.60 %
		0.0139	0.0155	
		Net: 0	Net: 0	
		Delta: 83 %	Delta: 83 %	
		Mid Volatility: 6.64 %	Mid Volatility: 6.64 %	

EUR Call Options (USD Pips)

18-Dec-2013	08-Jan-2014	15-Jan-2014	Strike	Strike
Sell	Buy	Sell	Buy	Strike
0.0128	0.0144	0.0165	0.0181	0.0178
Net: 0	Net: 0	Net: 0	Net: 0	Net: 0
Delta: 81 %	Delta: 71 %	Delta: 69 %	Delta: 69 %	Delta: 69 %
Mid Volatility: 6.97 %	Mid Volatility: 6.68 %	Mid Volatility: 6.84 %	Mid Volatility: 6.84 %	Mid Volatility: 6.84 %
0.0090	0.0106			
Net: 0	Net: 0			
Delta: 70 %	Delta: 70 %			
Mid Volatility: 6.82 %	Mid Volatility: 6.82 %			
0.0059	0.0075	0.0102	0.0118	0.0116
Net: 0	Net: 0	Net: 0	Net: 0	Net: 0
Delta: 57 %	Delta: 55 %	Delta: 55 %	Delta: 55 %	Delta: 55 %
Mid Volatility: 6.71 %	Mid Volatility: 6.48 %	Mid Volatility: 6.65 %	Mid Volatility: 6.65 %	Mid Volatility: 6.65 %
0.0034	0.0050			
Net: 0	Net: 0			
Delta: 42 %	Delta: 42 %			
Mid Volatility: 6.63 %	Mid Volatility: 6.63 %			
0.0017	0.0033	0.0056	0.0072	0.0069
Net: 0	Net: 0	Net: 0	Net: 0	Net: 0
Delta: 28 %	Delta: 38 %	Delta: 40 %	Delta: 40 %	Delta: 40 %
Mid Volatility: 6.60 %	Mid Volatility: 6.38 %	Mid Volatility: 6.55 %	Mid Volatility: 6.55 %	Mid Volatility: 6.55 %
0.0006	0.0022			
Net: 0	Net: 0			
Delta: 17 %	Delta: 17 %			
Mid Volatility: 6.64 %	Mid Volatility: 6.64 %			

Reset (ATM)

Scrollbars to navigate maturities

Scrollbars to navigate Strikes

6.2 STRIKES/MATURITIES ON THE OPTIONS BOARD

Saxo shows a maximum of 8 standard expiry dates ranging from 1 week to 6 months. These expiry dates are on Wednesdays and follow the below schedule:

- 1 weekly contract
- 2 bi-weekly contracts
- 2 four-weekly contracts
- 1 eight-weekly contract

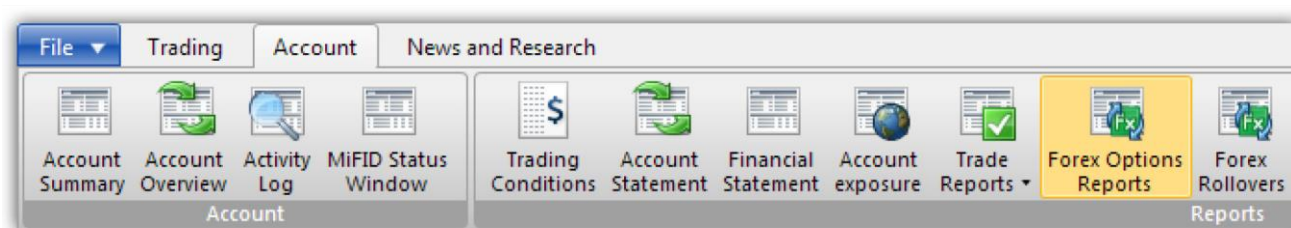
Note: Maximum streaming amounts are subject to change without prior notice.

7 FX OPTIONS REPORTS

Saxo has built a professional set of reports that provide a detailed analysis of FX positions across multiple currency pairs. These reports offer invaluable information for client's taking a portfolio-based approach to trading.

7.1 WHERE TO FIND THE REPORTS?

The FX options reports are available on SaxoTrader under the Account tab as shown below:



7.2 WHAT ARE THE REPORTS?

The reports are designed to show exposure to various factors under different scenarios. The data is aggregated by currency pair or by individual position.

The reports are available if at least one FX option position is open, and will include both FX spot and FX options positions. Binary Touch options are not included.

Open Positions							
	Instrument	Strike Price	Expiry Date	L/S	Amount	Open Price	Current Price
	Forex						
	EURUSD			Long	250,000	1.32202	1.29362
	USDCHF			Short	50,000	1.16832	0.94381
	Forex Vanilla Option						
	EURUSD	1.3105	08-Apr-2013	Long Call	1,000,000	0.0128	0.0039
	EURUSD	1.4000	17-Apr-2013	Short Call	1,100,000	0.0011	0.0002

7.3 SUMMARY PER CROSS

CROSS	SPOT	VALUE (EUR)	DELTA (CCY1)	GAMMA (CCY1)	VEGA (CCY2)	THETA (CCY2)	NO. OF POSITIONS
EURUSD	1.2940	-2,028	522,388	161,825	999	-221	4
USDCHF	0.9437	9,196	-50,000	0	0	0	1

This table aggregates the FX spot and FX options positions, shown previously in the 'Open Positions' window by currency pair, and shows the applicable risk in each pair. For instance, we can see that the EURUSD portfolio is comprised of 4 positions (Note: The short call position at 1.40 strike price was traded in two lots).

- Value:**
 The value of the overall position in a specific currency pair. It shows a positive number when long, and a negative number when short. For spot, this shows how much a position is in profit or loss.
- Delta:**
 The equivalent FX spot exposure of a given option position. This is the sensitivity of an option position's value with respect to the spot rate. In the above table, we can see that the overall position in EURUSD behaves as if it was long 522,388 EUR's at the spot price. If the EURUSD spot price moves 1 pip higher, the portfolio's value would increase by USD 52.20.
- Gamma:**
 The second derivative of the position value with respect to the spot price. It shows how much the delta changes when the spot price changes (i.e. how much the delta changes when the spot price moves up or down by 1%).
- Vega:**
 The sensitivity of a position with respect to the implied volatility used to price FX options. This shows how much money is made (positive number) or lost (negative number) when volatility increases or decreases by 1% . In the above example, we see a positive vega of USD 999 in EURUSD, meaning that the position's value will increase by this amount should volatility rise by 1%. This amount would be lost if the implied volatility of EURUSD were to decline by 1%.
- Theta:**
 Also known as time decay. This shows how much a position will increase or decrease in value from one day to the next. In the above example, the decrease in the value of EURUSD positions for one calendar day is USD 221.

Note: Since changes in interest rates typically do not pose as great a risk as delta, gamma, theta, and vega risks, rho and psi were intentionally left out of the reports.

7.4 NET DELTA BY CURRENCY

CROSS	DELTA	NO. OF POSITIONS
CHF	47,215	1
EUR	510,854	4
USD	-710,585	5

This table shows the delta, but this time netted by currency rather than by currency pair. This is useful to see triangulation risk, and to identify which currency a portfolio is most exposed to.

7.5 SUMMARY PER POSITION

Position ID	Direction	Amount	Cross	Strategy	Strike	Expiry	Value	Value (EUR)	Delta (Ccy1)	Gamma (Ccy1)	Vega (Ccy2)	Theta (Ccy2)
51050279	Sell	50,000	USDCHF	FX	1.1683	-	11,201	9,173	-50,000	-	-	-
460933124	Sell	100,000	EURUSD	Call	1.4000	17.04.13	0	0	-640	-91	-	-
460933126	Sell	1,000,000	EURUSD	Call	1.4000	17.04.13	-5	-4	-640	-912	-8	1
463122133	Buy	250,000	EURUSD	FX	1.3220	-	-7,230	-5,591	250,000	-	-	-
466043669	Buy	1,000,000	EURUSD	Call	1.3105	08.04.13	4,129	3,193	261,558	159,685	984	-216

The summary page displays a table showing the market sensitivities by position. This is useful in identifying where a specific exposure comes from. For example, the net EURUSD vega exposure (sensitivity to implied volatility) is primarily due to the long position expiring on 8th April 2013; 1.3105 EUR Call (last line of the table).

7.6 THE SPOT LADDER

The Spot Ladder displays the sensitivity in the value of a portfolio of positions, to a change in the spot price. The table below shows this sensitivity up to a 2.5% increase and decrease in the EURUSD spot price.

Note: It is possible to display a +/- 10% change in the spot price.

EURUSD		Value Chg (USD)	Delta (EUR)	Gamma (EUR)	Vega (USD)	Thea (USD)
2.50%	1.3259	24,943	939,875	137,735	933	-246
2.00%	1.3195	18,878	869,193	161,199	1,082	-270
1.50%	1.3130	13,292	787,137	176,912	1,167	-280
1.00%	1.3065	8,241	697,485	183,001	1,180	-274
0.50%	1.3001	3,792	605,163	177,682	1,118	-252
Spot	1.2936	0	517,222	160,446	989	-218
-0.50%	1.2871	-3,155	441,322	134,275	818	-179
-1.00%	1.2807	-5,803	381,195	104,956	636	-139
-1.50%	1.2742	-8,096	336,161	77,234	468	-102
-2.00%	1.2677	-10,146	303,949	53,614	325	-71
-2.50%	1.2613	-12,025	282,173	35,133	212	-46

7.7 THE SPOT / VOLATILITY GRID

The Spot / Volatility Grid provides a similar analysis to the Spot Ladder, but in addition it provides a two dimensional view of the sensitivity of a portfolio to a change in the spot price. A client is therefore able to see the impact of a +/- 2.5% change in the spot price, combined with a +/- 2 point change in the volatility of the portfolio. The table provides a profit and loss impact as well as an estimate of the portfolio delta.

Note: It is possible to display a +/-10% change in the spot price, combined with a +/-5 point change in the volatility of the portfolio.

EURUSD		-2.000	-1.000	vol	+1.000	+2.000
2.50%	1.3254	22,875 987,7K	23,796 961,1K	24,713 934,8K	25,592 908,2K	26,411 881,3K
2.00%	1.3190	16,518 898,4K	17,608 880,5K	18,686 863,1K	19,725 845,2K	20,706 826,4K
1.50%	1.3125	10,765 792,1K	11,963 786,6K	13,142 780,3K	14,285 772,5K	15,375 762,8K
1.00%	1.3060	5,702 674,1K	6,927 680,9K	8,137 690,0K	9,320 693,4K	10,461 693,1K
0.50%	1.2996	1,459 554,4K	2,591 579,3K	3,739 598,1K	4,886 611,6K	6,013 621K
Spot	1.2931	-1,893 450K	-983 483,4K	0 510,9K	1,026 532,8K	2,069 549,7K
-0.50%	1.2866	-4,534 372,5K	-3,874 406,1K	-3,109 436,1K	-2,263 462,1K	-1,363 483,8K
-1.00%	1.2802	-6,737 320,1K	-6,286 349,1K	-5,724 377,3K	-5,066 433,3K	-4,331 426,7K
-1.50%	1.2737	-8,675 287,2K	-8,388 309,4K	-7,994 333,3K	-7,502 357K	-6,926 379,5K
2.00%	1.2672	-10,455 268,3K	-10,286 283,6K	-10,027 302K	-9,675 321,9K	-9,238 342,1K
-2.50%	1.2608	-17,149 258,3K	-12,057 267,8K	-11,896 280,9K	-11,658 296,4K	-11,340 313,4K

8 MARGIN REQUIREMENT

The margin requirement on FX options is calculated per currency pair (ensuring alignment with the concept of tiered margins as per FX spot and forwards), and per maturity date. In each currency pair, there is an upper limitation to the margin requirement that is the highest potential exposure across the FX options and FX spot and forward positions multiplied by the prevailing spot margin requirement. This calculation also takes into account potential netting between FX options and FX spot and forward positions.

On limited risk strategies, e.g. a short call spread, the margin requirement on an FX options portfolio is calculated as the maximum future loss.

On unlimited risk strategies, e.g. naked short options, the margin requirement is calculated as the notional amount multiplied by the prevailing spot margin requirement.

Tiered margin rates are applicable to the FX options margin calculation when a clients margin requirement is driven by the prevailing FX spot margin requirement, and not the maximum future loss. The prevailing FX spot margin levels are tiered based on USD notional amounts, the higher the notional amount potentially the higher the margin rate. The tiered margin requirement is calculated per currency pair. In the FX options margin calculation, the prevailing spot margin requirement in each currency pair is the tiered or blended margin rate determined on the basis of the highest potential exposure across the FX options and FX spot and forward positions.

9 STOP-OUT PROCEDURES

PORTFOLIO TYPE	MARGIN HANDLING / STOP OUT
Vanilla options only	Stop-out is handled like any other margin instrument position. For bought Vanilla options, a client receives bought option risk value (collateral on the back of the option).
Vanilla options and spot	Vanilla options will be handled equally to any other margin instruments (no partial stop-out)

The system constantly monitors the risk of a short option positions expiring in-the-money (ITM) and long option positions expiring out-the-money (OTM).

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