Forex lot size and leverage

Leverage and lot size in trading, how they relate and work in forex trading.

Definitions

Financial leverage or simply leverage is a tool that increases the purchasing power of the trader's deposit. The mechanism is funded by the broker, or rather the liquidity provider working with the broker. The leverage mechanism is very simple.

The higher the leverage is, the more funds we can invest in trading. Simply put, leverage is kind of a bank loan. But it is much cheaper, and the borrowers usually risk only their own funds on the account.

The term **lot** is used to define the position size. You should note that lot and contract in Forex trading mean the same. 1 lot contains from 1 to 100 000 of the currency units. To find out the lot value, it is re-calculated in relation to the base currency, against which an instrument is traded. Most commonly, it is the USD.

Example:

We buy 0.01 lots GBPCHF at an exchange rate of 1.18600.

As the size of the standard forex lot is 100,000 currency units. In our case, it is 100,000 pounds.

Therefore:

0.01 lots GBPCHF = 100 000 GBP * 0.01 (lot size) * 1.297 *(the GBPUSD rate at the moment of this calculation).*

The cost of 0.01 lot of GBPCHF =1297 USD

Try to practice these calculations yourself. You can find the data for the lot size calculation here.

What are pips in Forex?

A pip (percentage in point) is the minimum unit of measurement to express the change in value between two currencies in the Forex market. In currency pairs, 1 pip is often one hundred-thousandth, that is, the fifth decimal place in a currency quote (0.00001). For the derivatives, one pip is usually one hundredth (0.01). Simply put, a pip is the last decimal place in a quote.

The pip value for the future position is very important for a trader. This figure will determine the size of the expected profit or loss.

The pip cost is directly affected by the lot size. For currency pairs, the pip price is calculated according to the formula:

The price of one pip = size of the purchased contract in units * size of 1 lot * 0.00001 * exchange rate of the base currency to the U.S. dollar.

An example for the above formula:

*The price of one pip of the GBPCHF position of 0.01 lots (the number of contracts) * 100,000 units * 0.00001 * 1.094 (CHFUSD exchange rate).*

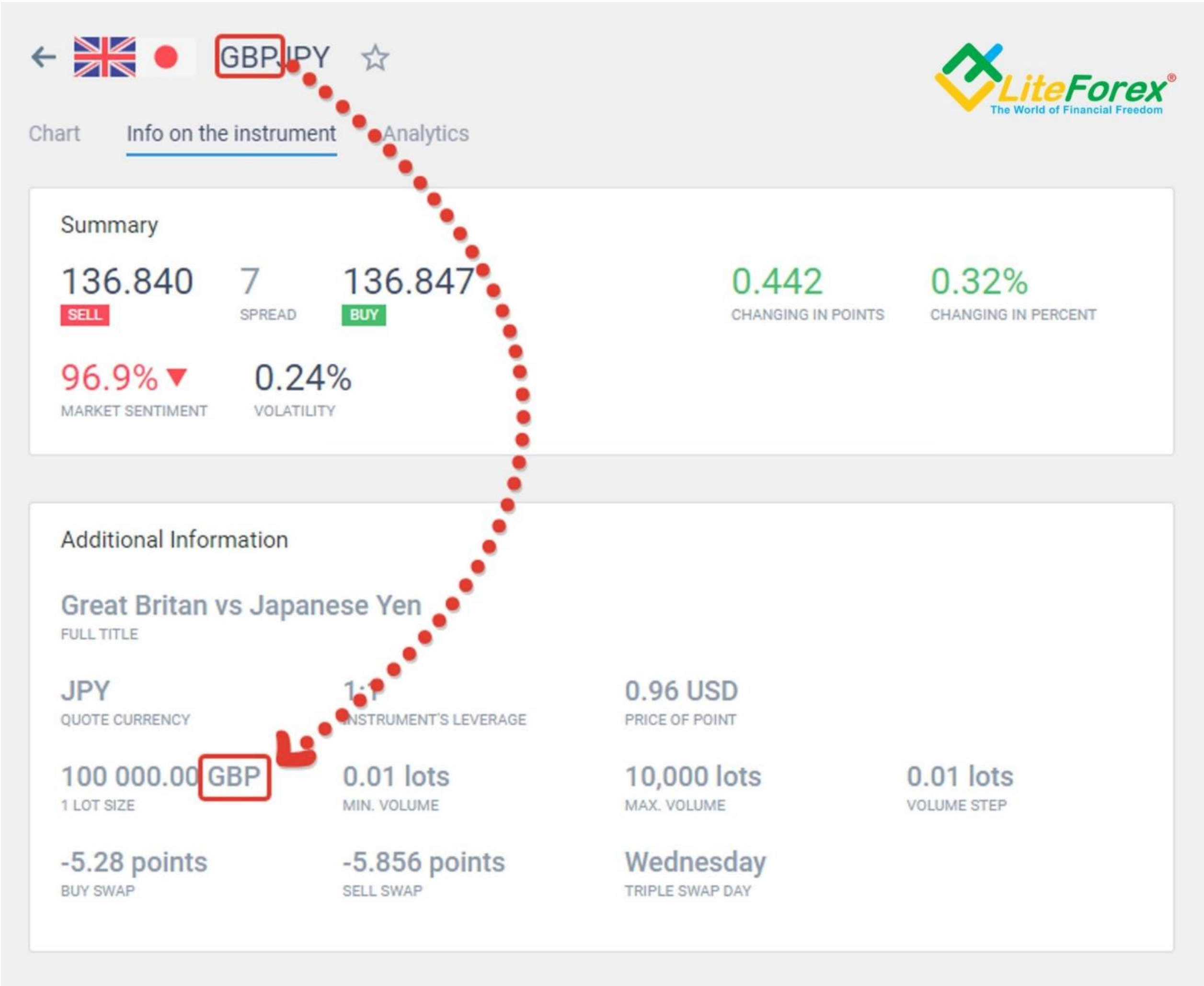
Therefore, the value of one pip for 0.01 lots of GBPCHF = 0.01094 USD.

What is the lot size in Forex?

The lot size is the number of currency units expressed in the quote currency that compose one whole contract.

The quote currency is the currency that used to value the asset price. In the EUR/USD currency pair, the base currency is the EUR.

You can see the quote currency in the Info on the instrument section. Choose the trading instrument you are interested in (share, currency pair, stock index, metal, etc.) and click on the “Info on the instrument” tab. Here, the size of 1 lot for GBPJPY is displayed.



The most common lot size for the Forex brokers the standard lot. There are also odd lots or fractional lots, where each next lot is ten times less than the previous one. There are most commonly used 4 types of lots in Forex. They are presented in the below table:

Lot	Number of units
Standard	100 000 units
Mini-lot (0,1 of a standard one)	10 000 units
Micro-lot (0,01 of a standard one)	1000 units
Nano-lot (0,001 of a standard one)	100 units

Note that the lot size could be understood as the trade volume, but it is a mistake. The contract (lot) size is a fixed value, it is set by the liquidity provider in advance. The client of a Forex broker can only change the "Volume of a trade in lots" parameter.

The lot size often depends on the type of the instrument traded. Moreover, the lot size often depends on the type of the traded instrument. The lot size can be either 1 unit (for example, in BTCUSD), or 50 units for platinum, 100 units for gold, and 100,000 units for all currency pairs.

Detailed information on the size of contracts (lots) for each trading instrument presented by LiteForex can be found in the interactive table here.

Difference and relation between leverage and lot in Forex

I gave already defined financial **leverage and lot size**. The relation between these two concepts is that both these figures affect the total trade cost. The difference is that this influence is made in opposite directions.

The larger is the lot size, the larger is the transaction volume, and, consequently, its value (I mean the security deposit you must have to open the position). However, the higher is the leverage, the less money is required for the trade margin and therefore, the less is the trade cost.

For you to better understand, let us have a look at the margin calculation formula.

Margin (collateral) = *(volume of lots * size of one lot * price of instrument traded) / leverage size.*

As you see, the leverage size is in the denominator of the formula and divides the product of the price and the parameters of the lot, thereby reducing the total value by the size of the leverage.

To make the calculations easier for you, I have compiled a cross table which will help you find out the margin (trade cost):

Trade volume in lots	Leverage size							
	1:1	**1:5**	**1:10**	**1:50**	**1:100**	**1:200**	**1:500**	**1:1000**
0.01	1000	200	100	20	10	5	2	1
0.05	5000	1000	500	100	50	25	10	5
0.10	10000	2000	1000	200	100	50	20	10
0.15	15000	3000	1500	300	150	75	30	15
0.20	20000	4000	2000	400	200	100	40	20
0.25	25000	5000	2500	500	250	125	50	25
0.30	30000	6000	3000	600	300	150	60	30
0.35	35000	7000	3500	700	350	175	70	35
0.40	40000	8000	4000	800	400	200	80	40
0.45	45000	9000	4500	900	450	225	90	45
0.50	50000	10000	5000	1000	500	250	100	50
0.55	55000	11000	5500	1100	550	275	110	55
0.60	60000	12000	6000	1200	600	300	120	60
0.65	65000	13000	6500	1300	650	325	130	65
0.70	70000	14000	7000	1400	700	350	140	70
0.75	75000	15000	7500	1500	750	375	150	75
0.80	80000	16000	8000	1600	800	400	160	80
0.85	85000	17000	8500	1700	850	425	170	85
0.90	90000	18000	9000	1800	900	450	180	90
0.95	95000	19000	9500	1900	950	475	190	95
1.00	100000	20000	10000	2000	1000	500	200	100

In this table, you see the leverage size in the horizontal lines (blue area) and the lot volume in the vertical columns (green area). To calculate the margin amount, you select the leverage that you trade with and the needed contract size. At the intersection of these two parameters, there will be the margin amount, expressed in units of the quote currency. Next, you multiply this figure by the exchange rate of the instrument to the U.S. dollar.

Important note for the above table:

1. All calculations were made with a standard lot of 100,000 units. If you have a different size, reduce the amount in the table by a multiple of your lot size.
2. This table is relevant only to the Forex market. To calculate the margin for CFDs and for other instruments, the calculation formula changes, since the percentage of the margin is taken into account.

Example:

We trade with a leverage of 1:500 and want to find out the cost of the USDJPY position at the rate of 104.95 with a lot size of 0.75. Using the table, we see that at the intersection of column 1:500 and lot 0.75, we have 150.

*Since the USDJPY an indirect quote, i.e. the U.S. dollar itself is quoted, then the exchange rate of the USD (quote currency) to the USD (base currency) is 1, and therefore, the amount of the collateral is 150 * 1 = 150 USD.*

Try to do the calculation yourself with different currency pairs, leverages, and lot sizes

Leverage and lot size calculator

If you do not want to calculate the trade cost using the table I presented here or convert the sum into the USA, you can use an online Forex trade calculator. Enter the key parameters of your trade, opening, and closing prices. The calculator will instantly give you the margin amount and the expected profit.

Types of leverage provided by brokers

Different trading instruments have different peculiarities of use based on the conditions of the liquidity provider working with the broker

For metals, oil, stock indexes, cryptocurrencies, and shares, the leverage is a decrease in the collateral (margin) by setting the margin percentage with the LiteForex broker. You can find this parameter in the specification for a trading instrument.

For trading currency pairs, the leverage is set by the trader.

So, to open a position, you will need either the percentage of asset price or the value divided by the leverage size you set on your account. It depends on the trading instrument you want to open a position on:

Asset type	Margin percentage	Leverage
Metals	**1%**	**1:100**
Palladium	**no**	**Set on the account**
Oil	**10%**	**1:10**
Stock Indexes	**1%**	**1:100**
Shares	**2%**	**1:50**
Currencies	**no**	**Set on the account**
Cryptocurrency	**10%**	**1:10**

An example of how leverage and lot relate in Forex trading

For trading currency pairs, the leverage is set by the trader on the trading account.

We open a EURUSD position of 1 lot.

To buy 1 lot of EURUSD (buy 100,000 EUR) without leverage, we will need ***118,748 USD****.*
Forex trading is margin trading and we set a 1:1000 leverage.

So, the minimum security (margin) will be 1000 times less than the actual value of the position we want to open.

That is, to buy ***100,000 EUR****, we will need only* ***118.75 USD margin****:*

An example of how leverage and lot relate in trading metals

You can use leverage to trade all precious metals except palladium.

Trading through a Forex broker is margin trading, so you can use financial leverage to open a position.

Therefore, the collateral (security deposit) is calculated according to the formula:

Collateral including leverage = Trade volume × Contract size × Price × Margin percentage / 100

Margin percentage (constant value) is the leverage provided by the broker for trading metals. LiteForex has it set at 1%.

How it works:

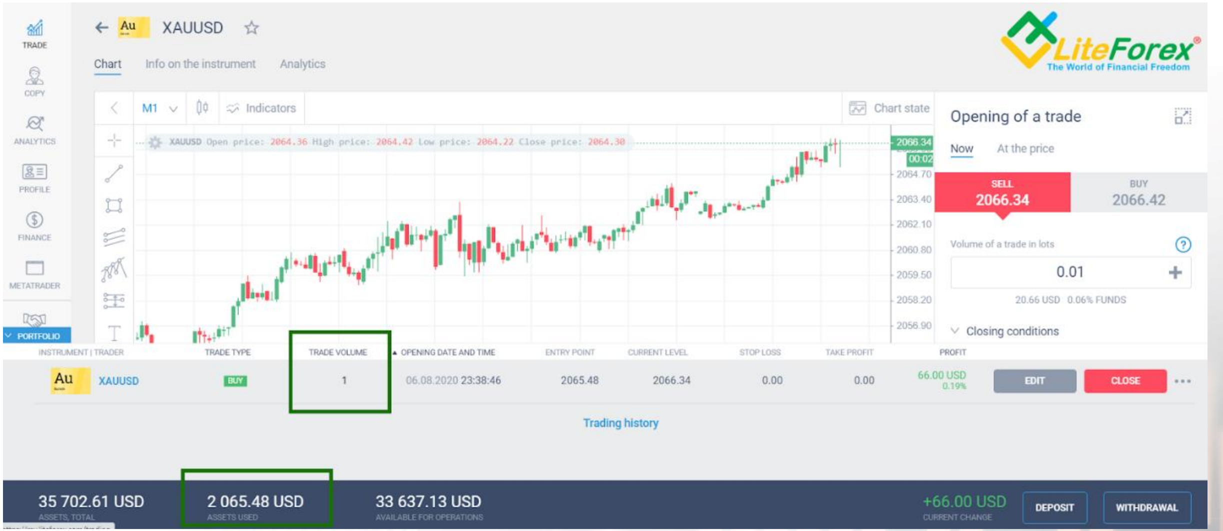
We open a 1 lot position on XAUUSD.

1 lot of gold is equal to 100 troy ounces.

*In US dollars, the cost of this trade will be **$206548**.*

*So, the margin will be only **1%** of the actual value of the trade we open.*

*That is, we will need **2065.48 USD** margin to buy **100 troy ounces of gold (1 lot):***



An example of how leverage and lot relate in trading shares

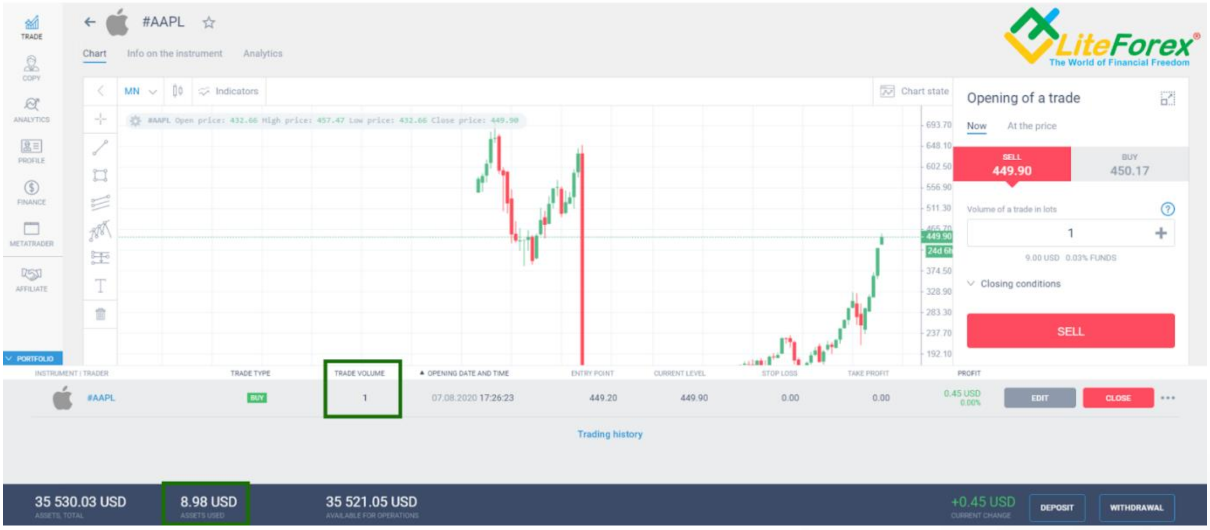
In trading shares, the leverage works in the same way as for gold. I described it in the previous example.

The margin for trading shares with LiteForex is 2%.

We want to buy 1 lot of APPLE shares through the broker.

Actual value of 1 share #AAPL is ***449.20 USD.***

The security deposit to open this position (margin) is 2% of the trade cost, which ***is 8.98 USD:***



Conclusion

Forex lot size and leverage are the basic concepts for every forex trader. It is of key importance to understand them. You should also try to make your own calculations based on examples. Experiment with the calculator and the table to understand how the lot size and leverage affect your position size in particular and your trading in general. This practice will help you develop your own strategy and determine the "best" leverage for your trading goals.