**Table of Swap Points TMS Trader**

Valid from 2018.06.11-2018.06.17. Swap points are published in the minimum quotation step for the financial instrument.

| Instrument | Long swap | Short swap |
|---|---|---|
| AUDCAD | -2.7408 | -5.4824 |
| AUDCHF | 2.3008 | -8.7470 |
| AUDJPY | 1.2774 | -8.1293 |
| AUDNZD | -5.1102 | -4.6596 |
| AUDUSD | -3.4217 | -2.8305 |
| CADCHF | 1.4877 | -7.5976 |
| CADJPY | 0.3530 | -6.8262 |
| CHFJPY | -6.3511 | -2.4633 |
| CHFPLN | -41.9959 | 10.6349 |
| EURAUD | -16.1056 | 3.2731 |
| EURCAD | -13.3431 | 1.5299 |
| EURCHF | -3.3415 | -5.9407 |
| EURCZK | -178.4915 | -38.5647 |
| EURGBP | -5.5699 | -1.1938 |
| EURHUF | -20.8507 | -10.1611 |
| EURJPY | -5.7255 | -4.1052 |
| EURNOK | -65.7193 | -11.6151 |
| EURNZD | -17.8949 | 3.7752 |

| | | |
|---|---|---|
| EURPLN | -43.3596 | 8.2635 |
| EURSEK | -39.6212 | -51.0320 |
| EURTRY | -317.6571 | 175.4722 |
| EURUSD | -12.3133 | 3.3405 |
| EURZAR | -509.1519 | 84.3316 |
| GBPAUD | -13.9018 | -0.6522 |
| GBPCAD | -10.8275 | -2.5709 |
| GBPCHF | -0.5208 | -10.0068 |
| GBPJPY | -2.8467 | -8.3030 |
| GBPPLN | -37.1443 | -2.6546 |
| GBPUSD | -10.6456 | 0.4695 |
| NZDJPY | 1.2876 | -7.7266 |
| NZDUSD | -3.0640 | -2.8106 |
| USDCAD | -2.6672 | -7.2810 |
| USDCHF | 3.7377 | -11.5561 |
| USDCZK | -0.6055 | -17.6890 |
| USDHUF | 0.4535 | -26.6112 |
| USDJPY | 2.4740 | -10.7508 |
| USDNOK | -2.0147 | -63.1398 |
| USDPLN | -12.6232 | -16.9489 |
| USDSEK | 24.4184 | -100.8370 |
| USDTRY | -239.1123 | 118.7935 |
| USDZAR | -344.3377 | -15.3265 |

| | | |
|---|---|---|
| USDMXN | -62.4962 | 8.5029 |
| XAGUSD | -1.2441 | 0.6108 |
| XAUUSD | -9.6105 | 4.7158 |
| COPPER | -0.5366 | 0.2633 |
| 3M | -2.6080 | 0.0000 |
| AMAZON | -21.2453 | 0.0000 |
| AIG | -0.6959 | 0.0000 |
| APPLE | -2.4181 | 0.0000 |
| AT&T | -0.4271 | 0.0000 |
| BABA | -2.5893 | 0.0000 |
| BOEING | -4.6649 | 0.0000 |
| CHEVRON | -1.5966 | 0.0000 |
| CISCO | -0.5490 | 0.0000 |
| CITI | -0.8645 | 0.0000 |
| COCACOLA | -0.5549 | 0.0000 |
| EBAY | -0.5087 | 0.0000 |
| EXXONM | -1.0555 | 0.0000 |
| FACEBOOK | -2.3870 | 0.0000 |
| GE | -0.1759 | 0.0000 |
| GMOTORS | -0.5587 | 0.0000 |
| GOOGLE | -14.3010 | 0.0000 |
| IBM | -1.8452 | 0.0000 |
| INTEL | -0.6951 | 0.0000 |

| | | |
|---|---|---|
| J&J | -1.5660 | 0.0000 |
| JPMORGAN | -1.4025 | 0.0000 |
| MCDONALD | -2.1329 | 0.0000 |
| MICROSFT | -1.2834 | 0.0000 |
| PFIZER | -0.4630 | 0.0000 |
| P&G | -0.9745 | 0.0000 |
| STBUCKS | -0.7146 | 0.0000 |
| WALMART | -1.0647 | 0.0000 |
| GOLDMAN | -2.9473 | 0.0000 |
| UPS | -1.4722 | 0.0000 |
| ALCOA | -0.6127 | 0.0000 |
| AMERICANEXP | -1.2753 | 0.0000 |
| BOA | -0.3787 | 0.0000 |
| CATERPILLAR | -1.9614 | 0.0000 |
| SNAP | -0.1653 | 0.0000 |
| DISNEY | -1.3127 | 0.0000 |
| FORD | -0.1527 | 0.0000 |
| FEDEX | -3.2850 | 0.0000 |
| HARLEY-DAVI | -0.5383 | 0.0000 |
| HP | -0.2021 | 0.0000 |
| NIKE | -0.9456 | 0.0000 |
| PEPSI | -1.2940 | 0.0000 |
| PM | -1.0028 | 0.0000 |

| | | |
|---|---|---|
| TWITTER | -0.5203 | 0.0000 |
| VISA | -1.7013 | 0.0000 |
| PAYPAL | -1.0652 | 0.0000 |
| TESLA | -4.0115 | 0.0000 |
| NETFLIX | -4.5527 | 0.0000 |
| BASF | -5.0543 | 0.0000 |
| DTELEKOM | -0.7889 | 0.0000 |
| ALLIANZ | -10.5482 | 0.0000 |
| BAYER | -5.6916 | 0.0000 |
| BEIERSDO | -5.7353 | 0.0000 |
| DAIMLERC | -3.5534 | 0.0000 |
| DBANK | -0.5612 | 0.0000 |
| SIEMENS | -6.6869 | 0.0000 |
| LUFTHANS | -1.3388 | 0.0000 |
| CECONOMY | -0.4770 | 0.0000 |
| ADIDAS | -11.6269 | 0.0000 |
| BMW | -4.9890 | 0.0000 |
| COMMERZBANK | -0.5541 | 0.0000 |
| CONTINENTAL | -12.8514 | 0.0000 |
| HENKEL | -6.2741 | 0.0000 |
| RWE | -1.1105 | 0.0000 |
| THYSSEN | -1.3697 | 0.0000 |
| VOLKSWAGEN | -9.3412 | 0.0000 |

| | | |
|---|---|---|
| BARCLAYS | -1.6430 | 0.0000 |
| GSK | -12.6544 | 0.0000 |
| M&S | -2.4129 | 0.0000 |
| RBS | -2.2101 | 0.0000 |
| ROLLS-ROYCE | -6.8085 | 0.0000 |
| RIOTINTO | -36.3829 | 0.0000 |
| SHELL | -21.6121 | 0.0000 |
| STAN | -6.0447 | 0.0000 |
| TESCO | -2.0581 | 0.0000 |
| UNILEVER | -34.0258 | 0.0000 |
| VODAFONE | -1.5539 | 0.0000 |
| SANTANDER | -0.2766 | 0.0000 |
| TELEFONICA | -0.4442 | 0.0000 |
| BBVA | -0.3559 | 0.0000 |
| IBERDOLA | -0.3742 | 0.0000 |
| REPSOL | -1.0006 | 0.0000 |
| CAIXABANK | -0.2264 | 0.0000 |
| ABERTIS | -1.0700 | 0.0000 |
| GASNATURAL | -1.2216 | 0.0000 |
| REDELECTRIC | -1.0236 | 0.0000 |
| GRIFOLS | -1.5866 | 0.0000 |
| BANKINTER | -0.5011 | 0.0000 |
| MAPFRE | -0.1528 | 0.0000 |

| | | |
|---|---|---|
| ACS | -2.1551 | 0.0000 |
| AMADEUS | -4.1330 | 0.0000 |
| INDITEX | -1.6461 | 0.0000 |
| ACERINOX | -0.6962 | 0.0000 |
| AENA | -9.2770 | 0.0000 |
| BANKIA | -0.1967 | 0.0000 |
| IAG | -0.4588 | 0.0000 |
| SACYR | -0.1483 | 0.0000 |
| TECNICAS | -1.5330 | 0.0000 |
| ASHR.ETF | -0.3737 | -0.0373 |
| DBA.ETF | -0.2370 | -0.0237 |
| DBC.ETF | -0.2254 | -0.0225 |
| EEM.ETF | -0.5851 | -0.0584 |
| EFA.ETF | -0.8889 | -0.0887 |
| EWA.ETF | -0.2888 | -0.0288 |
| EWW.ETF | -0.5664 | -0.0566 |
| EWY.ETF | -0.9277 | -0.0926 |
| EWZ.ETF | -0.4309 | -0.0430 |
| FXI.ETF | -0.6079 | -0.0607 |
| GLD.ETF | -1.5535 | -0.1551 |
| HYG.ETF | -1.0817 | -0.1080 |
| IVV.ETF | -3.5373 | -0.3531 |
| IYR.ETF | -1.0028 | -0.1001 |

| | | |
|---|---|---|
| OIH.ETF | -0.3420 | -0.0342 |
| SLV.ETF | -0.1993 | -0.0199 |
| SPY.ETF | -3.5131 | -0.3507 |
| SSO.ETF | -1.4702 | -0.1468 |
| SVXY.ETF | -0.1735 | -0.0173 |
| TBT.ETF | -0.4705 | -0.0470 |
| VNQ.ETF | -1.0125 | -0.1011 |
| VXX.ETF | -0.4113 | -0.0411 |
| XHB.ETF | -0.5219 | -0.0521 |
| XLB.ETF | -0.7682 | -0.0767 |
| XLE.ETF | -0.9716 | -0.0970 |
| XLF.ETF | -0.3547 | -0.0354 |
| XLI.ETF | -0.9652 | -0.0964 |
| XLP.ETF | -0.6419 | -0.0641 |
| XLU.ETF | -0.6149 | -0.0614 |
| XLV.ETF | -1.0740 | -0.1072 |
| XLY.ETF | -1.3880 | -0.1386 |
| AUDCAD. | -1.0963 | -3.8377 |
| AUDCHF. | 3.5501 | -7.4975 |
| AUDJPY. | 2.6710 | -6.7358 |
| AUDNZD. | -3.3066 | -2.8559 |
| AUDUSD. | -2.1544 | -1.5631 |
| CADCHF. | 2.7538 | -6.3314 |

| | | |
|---|---|---|
| CADJPY. | 1.7652 | -5.4139 |
| CHFJPY. | -4.4922 | -0.6042 |
| CHFPLN. | -3.5913 | 1.6721 |
| EURAUD. | -13.5217 | 5.8571 |
| EURCAD. | -10.7934 | 4.0798 |
| EURCHF. | -1.4044 | -4.0035 |
| EURGBP. | -4.1100 | 0.2661 |
| EURJPY. | -3.5649 | -1.9446 |
| EURNOK. | -49.8829 | 4.2237 |
| EURNZD. | -15.0987 | 6.5718 |
| EURPLN. | -3.6289 | 1.5335 |
| EURSEK. | -22.5183 | -33.9266 |
| EURTRY. | -313.1992 | 179.9311 |
| EURUSD. | -10.3483 | 5.3055 |
| GBPAUD. | -10.9923 | 2.2575 |
| GBPCAD. | -7.9564 | 0.3003 |
| GBPCHF. | 1.6605 | -7.8255 |
| GBPJPY. | -0.4139 | -5.8701 |
| GBPNZD. | -12.4237 | 2.7074 |
| GBPPLN. | -2.9185 | 0.5309 |
| GBPUSD. | -8.4331 | 2.6822 |
| NZDUSD. | -1.8930 | -1.6395 |
| USDCAD. | -0.5046 | -5.1184 |

| | | |
|---|---|---|
| USDCHF. | 5.3806 | -9.9131 |
| USDHKD. | 4.5767 | -38.5746 |
| USDJPY. | 4.3066 | -8.9184 |
| USDNOK. | 11.4167 | -49.7062 |
| USDPLN. | -0.6627 | -1.0950 |
| USDSEK. | 38.9240 | -86.3288 |
| USDTRY. | -235.3329 | 122.5737 |
| GOLD. | -1.1043 | 0.7507 |
| SILVER. | -8.5307 | 5.7958 |
| DE30. | -9.2612 | -12.1189 |
| US100. | -10.0237 | -1.8948 |
| FR40. | -3.9334 | -5.1481 |
| US500. | -3.8964 | -0.7366 |
| GB100. | -7.4103 | -5.3018 |
| US30. | -3.5529 | -0.6716 |
| EU50. | -0.2499 | -0.3270 |
| ES35. | -0.7003 | -0.9168 |
| IT40. | -1.5721 | -2.0575 |
| CH20. | -0.5263 | -0.9051 |
| BITCOIN | -132.0641 | -57.1902 |

The maximum size of the interest rate margin for calculating swap points has been specified in the TMS EUROPE Fee and Commission Table.

To establish the above-mentioned Swap Points, TMS EUROPE applied a margin in the amount of:

| TMS EUROPE | |
|---|---|
| **The amount of interest rate commission in order to swap points calculation** | |
| EURTRY, USDTRY, EURZAR, USDZAR, USDMXN, EURTRY., USDTRY. | 4,00% |
| Equities CFD and ETF | 2,50% |
| Cryptocurrency | 5,00% |
| Other currency pairs with fixed spread and COPPER, XAGUSD, XAUUSD | 0,65% |
| Other floating currency pairs and GOLD., SILVER. | 0,35% |
| Floating Indicies | 3,00% |

Formulas for calculating CFD swap points based on currencies, cryptocurrencies, gold, silver and copper (swap points for CFDs based on cryptocurrencies, gold, silver, copper, DE30., US100., FR40., US500., GB100., US30., EU50., ES35., IT40. and CH20. are calculated based on the formula used to determine swap points for currency instruments, with the reservation, however, that the interest rate is determined only for one currency in which the underlying instrument is quoted).

$$long\ swap = -\left(spot_{BID} \times \frac{\left(1 + (\text{deposit rate of quoted currency}_{ASK} + \text{markup}) \times \frac{1}{T}\right)}{\left(1 + (\text{deposit rate of base currency}_{BID} - \text{markup}) \times \frac{1}{T}\right)} - spot_{BID}\right) \times multiplier$$

$$short\ swap = \left(spot_{ASK} \times \frac{\left(1 + (\text{deposit rate of quoted currency}_{BID} - \text{markup}) \times \frac{1}{T}\right)}{\left(1 + (\text{deposit rate of base currency}_{ASK} + \text{markup}) \times \frac{1}{T}\right)} - spot_{ASK}\right) \times multiplier$$

*long swap - the value of swap points calculated for long position;*

*short swap – the value of swap points calculated for a short position;*

*spot BID,ASK – exchange rate of a given currency pair in the moment of calculating BID or ASK swap points;*

*markup – the amount of commission that TMS EUROPE imposes on the interest rate;*

*T - means the number of days according to the convention adopted for a given currency (eg for USD, the year has 360 days, while for PLN 365 days);*

*multiplier - the coefficient resulting from the minimum step of quotations, e.g. for EURUSD, the minimum step of quotations is 0.00001, therefore the multiplier for the calculation of swap points will be 100 000;*

*deposit rate of base/quoted currency BID,ASK - for calculating swap points, TMS EUROPE accepts quotes from the interbank market based on the instruments presented in the table below:*

| **Currency** | **Bloomberg ticker** | **Day counting convention (T)** | **Deposit rate** |
|---|---|---|---|
| EUR | EUDR1Z CMPN Curncy | 360 | Euro 1 Week Deposit |
| USD | USDR1Z CMPN Curncy | 360 | United States Dollar 1 Week Deposit |
| PLN | PZDR1Z CMPN Curncy | 365 | Polish Zloty 1 Week Deposit |
| CAD | CDDR1Z CMPN Curncy | 360 | Canadian Dollar 1 Week Deposit |
| JPY | JYDR1Z CMPN Curncy | 360 | Japanese Yen 1 Week Deposit |
| GBP | BPDR1Z CMPN Curncy | 365 | British Pound 1 Week Deposit |
| CHF | SFDR1Z Curncy | 360 | Swiss Franc 1 Week Deposit |
| AUD | ADDR1Z CMPN Curncy | 360 | Australian Dollar 1 Week Deposit |
| NZD | NDDR1Z CMPN Curncy | 360 | New Zealand Dollar 1 Week Deposit |

| | | | |
|---|---|---|---|
| CZK | CKDR1Z Curncy | 360 | Czech Koruna 1 Week Deposit |
| SEK | SKDR1Z Curncy | 360 | Swedish Krona 1 Week Deposit |
| NOK | NKDR1Z Curncy | 360 | Norwegian Krone 1 Week Deposit |
| ZAR | SADR1Z CURNCY | 360 | South African Rand 1 Week Deposit |
| HUF | HFDR1Z Curncy | 360 | Hungarian Forint 1 Week Deposit |
| RON | RNDR1Z CMPN Curncy | 360 | Romanian Leu 1 Week Deposit |
| HKD | HDDR1Z Curncy | 360 | Hong Kong Dollar 1 Week Deposit |
| TRY | TYDR1Z CMPN Curncy | 360 | Turish Lira 1 Week Deposit |
| MXN | MXNI1M CMPN Curncy | 360 | Mexican Peso 1 Month Froward Implied Yeld |

*Example.*

*Calculation for  EURUSD*

*spot BID : 1,2114*

*spot ASK : 1,2115*

*T: 360*

*Markup: 0,65%*

*deposit rate of base currency BID : -0,5%*

*deposit rate of base currency ASK : -0,37%*

*deposit rate of quoted currency BID : 1,74%*

*deposit rate of quoted currency ASK : 1,82%*

$$long\ swap = -\left(1{,}2114 \times \frac{\left(1 + (1{,}82\% + 0{,}65\%) \times \frac{1}{360}\right)}{\left(1 + \left((-0{,}5\%) - 0{,}65\%\right) \times \frac{1}{360}\right)} - 1{,}2114\right) \times 100000 = -12{,}1817$$

$$short\ swap = \left(1{,}2115 \times \frac{\left(1 + (1{,}74\% - 0{,}65\%) \times \frac{1}{360}\right)}{\left(1 + \left((-0{,}37) + 0{,}65\%\right) \times \frac{1}{360}\right)} - 1{,}2115\right) \times 100000 = 2{,}7259$$

Formulas for calculation of swap points for CFD based on value of shares and ETFs. If for the CFDs based on the value of shares the swap points for the short position are negative, we assume the value 0.

$$long\ swap = -\mathrm{spot}_{BID}\left((deposit\ rate\ + \mathrm{markup}) \times \frac{1}{T}\right) \times multiplier$$

$$short\ swap = \mathrm{spot}_{ASK}\left((deposit\ rate - \mathrm{markup}) \times \frac{1}{T}\right) \times multiplier$$

*long swap - the value of swap points calculated for long position;*

*short swap – the value of swap points calculated for a short position;*

*spot BID,ASK – exchange rate of a given currency pair in the moment of calculating BID or ASK swap points;*

*markup – the amount of commission that TMS EUROPE imposes on the interest rate;*

*T - means the number of days according to the convention adopted for a given currency (eg for USD, the year has 360 days, while for PLN 365 days);*

*multiplier - the coefficient resulting from the minimum step of quotations, e.g. for EURUSD, the minimum step of quotations is 0.00001, therefore the multiplier for the calculation of swap points will be 100,000;*

*deposit rate of quoted currency BID,ASK - for calculating swap points, TMS EUROPE accepts quotes from the interbank market based on the instruments presented in the table below:*

| **Currency** | **Bloomberg ticker** | **Day counting convention (T)** | **Deposit rate** |
|---|---|---|---|
| USD | US0001M Index | 360 | ICE LIBOR USD 1 Month |
| EUR | EE0001M Index | 360 | ICE LIBOR EUR 1 Month |
| PLN | WIBR1M Index | 365 | GPW Benchmark WIBOR PLN 1 Month |
| GBP | BP0001M Index | 365 | ICE LIBOR GBO 1 Month |