

### Table of Swap Points TMS Trader

Valid from 2018.02.19-2018.02.25. Swap points are published in the minimum quotation step for the financial instrument.

Instrument	Long swap	Short swap
AUDCAD	-1,6578	-4,8355
AUDCHF	2,7172	-7,4178
AUDJPY	1,4528	-6,8427
AUDNZD	-4,1742	-2,6838
AUDUSD	-1,8685	-2,8360
CADCHF	1,4993	-6,3274
CADJPY	0,0471	-5,5835
CHFJPY	-5,9252	-1,4019
CHFPLN	-33,9626	10,6682
EURAUD	-14,0168	4,6582
EURCAD	-11,5616	2,0354
EURCHF	-2,3695	-4,5151
EURCZK	-149,1046	-12,6635
EURGBP	-4,5571	-0,1404
EURHUF	-16,5071	-6,8295
EURJPY	-5,3249	-2,5707
EURNOK	-65,1304	6,1656
EURNZD	-16,2159	6,1695
EURPLN	-34,4416	9,3019
EURSEK	-28,0765	-37,9928

EURTRY	-228,5673	105,7196
EURUSD	-10,0605	3,2041
EURZAR	-508,4636	107,2092
GBPAUD	-11,1789	1,0784
GBPCAD	-8,4341	-1,8579
GBPCHF	0,7330	-8,1635
GBPJPY	-2,1000	-6,4220
GBPPLN	-26,5977	-0,5548
GBPUSD	-7,6818	0,3094
NZDJPY	1,8988	-6,9200
NZDUSD	-1,2286	-3,1538
USDCAD	-2,5836	-5,0626
USDCHF	3,0721	-8,5974
USDCZK	-1,0773	-11,9117
USDHUF	0,1393	-18,8877
USDJPY	1,4212	-7,7577
USDNOK	-10,8041	-36,5250
USDPLN	-9,8509	-10,3280
USDSEK	20,1944	-73,2486
USDTRY	-164,1111	65,1821
USDZAR	-347,5038	24,2791
USDMXN	-56,4528	9,0910
XAGUSD	-0,9259	0,4680

XAUUSD	-7,4843	3,7802
COPPER	-0,3964	0,2003
3M	-2,6921	0,0000
AMAZON	-16,4685	0,0000
AIG	-0,6763	0,0000
APPLE	-1,9609	0,0000
AT&T	-0,4223	0,0000
BABA	-2,0886	0,0000
BOEING	-4,0358	0,0000
CHEVRON	-1,2749	0,0000
CISCO	-0,5041	0,0000
CITI	-0,8736	0,0000
COCACOLA	-0,5113	0,0000
EBAY	-0,4927	0,0000
EXXONM	-0,8705	0,0000
FACEBOOK	-2,0169	0,0000
GE	-0,1713	0,0000
GMOTORS	-0,4671	0,0000
GOOGLE	-12,4636	0,0000
IBM	-1,7757	0,0000
INTEL	-0,5179	0,0000
J&J	-1,5139	0,0000
JPMORGAN	-1,3043	0,0000

MCDONALD	-1,7944	0,0000
MICROSFT	-1,0454	0,0000
PFIZER	-0,4124	0,0000
P&G	-0,9389	0,0000
STBUCKS	-0,6420	0,0000
WALMART	-1,1908	0,0000
GOLDMAN	-3,0427	0,0000
UPS	-1,2098	0,0000
ALCOA	-0,5384	0,0000
AMERICANEXP	-1,1008	0,0000
BOA	-0,3635	0,0000
CATERPILLAR	-1,7774	0,0000
SNAP	-0,2321	0,0000
DISNEY	-1,2102	0,0000
FORD	-0,1208	0,0000
FEDEX	-2,7767	0,0000
HARLEY-DAVI	-0,5362	0,0000
HP	-0,1863	0,0000
NIKE	-0,7767	0,0000
PEPSI	-1,2629	0,0000
PM	-1,1861	0,0000
TWITTER	-0,3758	0,0000
VISA	-1,3857	0,0000

PAYPAL	-0,8907	0,0000
TESLA	-3,8142	0,0000
NETFLIX	-3,1671	0,0000
BASF	-5,0338	0,0000
DTELEKOM	-0,7652	0,0000
ALLIANZ	-11,1446	0,0000
BAYER	-5,7052	0,0000
BEIERSDO	-5,3712	0,0000
DAIMLERC	-4,1339	0,0000
DBANK	-0,7723	0,0000
SIEMENS	-6,4786	0,0000
LUFTHANS	-1,5724	0,0000
METRO	-0,6495	0,0000
ADIDAS	-10,5228	0,0000
BMW	-5,1008	0,0000
COMMERZBANK	-0,7536	0,0000
CONTINENTAL	-13,3290	0,0000
HENKEL	-6,2565	0,0000
RWE	-0,9430	0,0000
THYSSEN	-1,3294	0,0000
VOLKSWAGEN	-9,9778	0,0000
BARCLAYS	-1,6594	0,0000
TOBACCO	-36,5111	0,0000

BRITISHLAND	-5,3204	0,0000
BURBERRY	-12,7104	0,0000
BTGROUP	-1,8629	0,0000
GSK	-10,7901	0,0000
HL	-13,8547	0,0000
INTERCONT	-38,5536	0,0000
LSE	-33,0495	0,0000
M&S	-2,4584	0,0000
PEARSON	-5,7158	0,0000
RBS	-2,2665	0,0000
ROLLS-ROYCE	-6,8133	0,0000
RIOTINTO	-33,6319	0,0000
SHELL	-18,6083	0,0000
RSA	-4,9841	0,0000
SAINSBURY	-2,0704	0,0000
SKY	-9,0027	0,0000
SMITHSGROUP	-12,9934	0,0000
STAN	-6,7395	0,0000
TESCO	-1,6939	0,0000
UNILEVER	-30,9455	0,0000
VODAFONE	-1,6672	0,0000
SANTANDER	-0,3275	0,0000
TELEFONICA	-0,4431	0,0000

BBVA	-0,4118	0,0000
IBERDOLA	-0,3553	0,0000
REPSOL	-0,8136	0,0000
CAIXABANK	-0,2375	0,0000
ABERTIS	-1,1345	0,0000
FERROVIAL	-1,0176	0,0000
GASNATURAL	-1,0692	0,0000
REDELECTRIC	-0,9380	0,0000
GRIFOLS	-1,3725	0,0000
SABADELL	-0,1063	0,0000
BANKINTER	-0,5153	0,0000
ENAGAS	-1,2070	0,0000
MAPFRE	-0,1615	0,0000
ACS	-1,6599	0,0000
AMADEUS	-3,4584	0,0000
CELLNEX	-1,1849	0,0000
INDITEX	-1,5567	0,0000
ACERINOX	-0,6819	0,0000
AENA	-9,6777	0,0000
BANKIA	-0,2289	0,0000
DIA	-0,2299	0,0000
EBRO	-1,1761	0,0000
GAMESA	-0,7247	0,0000

IAG	-0,4068	0,0000
INDRA	-0,6335	0,0000
OBRASCON	-0,2905	0,0000
SACYR	-0,1492	0,0000
GESTEVISION	-0,5475	0,0000
TECNICAS	-1,5083	0,0000
VISCOFAN	-3,1676	0,0000
ASHR.ETF	-0,3664	-0,0813
DBA.ETF	-0,2153	-0,0478
DBC.ETF	-0,1883	-0,0418
EEM.ETF	-0,5635	-0,1248
EFA.ETF	-0,8119	-0,1798
EWA.ETF	-0,2610	-0,0579
EWT.ETF	-0,4296	-0,0951
EWV.ETF	-0,5925	-0,1313
EWY.ETF	-0,8613	-0,1908
EWZ.ETF	-0,5175	-0,1146
FXI.ETF	-0,5613	-0,1244
GLD.ETF	-1,4549	-0,3221
HYG.ETF	-0,9833	-0,2178
IBB.ETF	-1,2545	-0,2778
IVV.ETF	-3,1309	-0,6932
IYR.ETF	-0,8531	-0,1890



OIH.ETF	-0,2772	-0,0614
SLV.ETF	-0,1789	-0,0396
SPY.ETF	-3,1081	-0,6881
SSO.ETF	-1,2914	-0,2860
SVXY.ETF	-0,1449	-0,0321
TBT.ETF	-0,4367	-0,0967
TUR.ETF	-0,5099	-0,1132
VNQ.ETF	-0,8562	-0,1897
VXX.ETF	-0,4781	-0,1058
XHB.ETF	-0,4882	-0,1083
XLB.ETF	-0,6880	-0,1525
XLE.ETF	-0,7745	-0,1717
XLF.ETF	-0,3297	-0,0730
XLI.ETF	-0,8792	-0,1948
XLP.ETF	-0,6324	-0,1401
XLU.ETF	-0,5701	-0,1262
XLV.ETF	-0,9715	-0,2151
XLY.ETF	-1,1920	-0,2639
AUDCAD.	-0,8289	-4,0066
AUDCHF.	3,3301	-6,8048
AUDJPY.	2,1558	-6,1397
AUDNZD.	-3,2797	-1,7892
AUDUSD.	-1,2090	-2,1765

CADCHF.	2,1155	-5,7111
CADJPY.	0,7538	-4,8768
CHFJPY.	-4,9695	-0,4461
CHFPLN.	-3,0987	1,3645
EURAUD.	-12,7109	5,9643
EURCAD.	-10,2625	3,3346
EURCHF.	-1,4089	-3,5545
EURGBP.	-3,8233	0,5934
EURJPY.	-4,2231	-1,4690
EURNOK.	-57,0894	14,2077
EURNZD.	-14,8139	7,5717
EURPLN.	-3,1011	1,2733
EURSEK.	-19,8186	-29,7337
EURTRY.	-226,6260	107,6610
EURUSD.	-9,0268	4,2377
GBPAUD.	-9,7161	2,5413
GBPCAD.	-6,9790	-0,4026
GBPCHF.	1,8090	-7,0875
GBPJPY.	-0,8660	-5,1879
GBPNZD.	-11,7478	4,0461
GBPPLN.	-2,2755	0,3289
GBPUSD.	-6,5241	1,4671
NZDUSD.	-0,6143	-2,5394

USDCAD.	-1,5362	-4,0152
USDCHF.	3,8466	-7,8229
USDHKD.	8,9082	-47,8005
USDJPY.	2,3094	-6,8694
USDNOK.	-4,3216	-30,0414
USDPLN.	-0,7085	-0,7562
USDSEK.	26,8517	-66,5899
USDTRY.	-162,5465	66,7468
GOLD.	-0,8564	0,5375
SILVER.	-6,9230	4,3416
DE30.	-8,9585	-11,7303
US100.	-8,6809	-2,6575
FR40.	-3,7879	-4,9606
US500.	-3,4916	-1,0690
GB100.	-6,9374	-4,9758
US30.	-3,2223	-0,9865
EU50.	-0,2465	-0,3228
ES35.	-0,7047	-0,9246
IT40.	-1,6343	-2,1403
CH20.	-0,5425	-0,9358
BITCOIN	-198,3886	-107,5549

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 Brokers applied a margin in the amount of:

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	2,00%
Other currency pairs with fixed spread and COPPER	0,45%
Other floating currency pairs	0,30%
Floating Indices	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).

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

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

*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<sub>BID</sub> : 1,2407*

*spot<sub>ASK</sub> : 1,2408*

*T: 360*

*Markup: 0,45%*

*deposit rate of base currency<sub>BID</sub> : -0,43%*

*deposit rate of base currency<sub>ASK</sub> : -0,375%*

*deposit rate of quoted currency<sub>BID</sub> : 1,46%*

deposit rate of quoted currency  $_{ASK}$  : 1,55%

$$\begin{aligned} \text{long swap} &= - \left( 1,2415 \times \frac{\left( 1 + (1,55\% + 0,45\%) \times \frac{1}{360} \right)}{\left( 1 + ((-0,43\%) - 0,45\%) \times \frac{1}{360} \right)} - 1,2415 \right) \times 100000 \\ &= -9,9258 \end{aligned}$$

$$\begin{aligned} \text{short swap} &= - \left( 1,2416 \times \frac{\left( 1 + (1,46\% - 0,45\%) \times \frac{1}{360} \right)}{\left( 1 + ((-0,375) + 0,45\%) \times \frac{1}{360} \right)} - 1,2416 \right) \times 100000 \\ &= 3,2226 \end{aligned}$$

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

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

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

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

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

*spot*  $_{\text{BID,ASK}}$  – 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 <sub>BID,ASK</sub> - 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