

### Table of Swap Points TMS Trader

Valid from 2018.08.13-2018.08.19. Swap points are published in the minimum quotation step for the financial instrument.

Instrument	Long swap	Short swap
AUDCAD	-3.8505	-5.0457
AUDCHF	2.1096	-8.3285
AUDJPY	0.9806	-7.7559
AUDNZD	-6.2962	-3.8397
AUDUSD	-3.4532	-2.6254
CADCHF	1.6811	-8.2916
CADJPY	0.4429	-7.6464
CHFJPY	-6.3316	-2.4036
CHFPLN	-41.3703	9.4098
EURAUD	-16.3306	2.9358
EURCAD	-14.7811	1.7672
EURCHF	-3.3189	-5.7258
EURCZK	-21.7854	-0.8917
EURGBP	-6.4113	-0.5597
EURHUF	-18.6057	-13.2048
EURJPY	-5.8101	-4.0306
EURNOK	-66.3881	-12.5906
EURNZD	-19.9804	5.1704

EURPLN	-42.1935	6.1599
EURSEK	-42.1563	-51.4357
EURTRY	-574.4005	326.6314
EURUSD	-12.0621	3.2410
EURZAR	-555.3967	101.8004
GBPAUD	-12.4239	-2.3390
GBPCAD	-10.9463	-3.4005
GBPCHF	0.5261	-10.4836
GBPJPY	-1.8004	-9.0291
GBPPLN	-31.0966	-8.6051
GBPUSD	-9.2447	-0.4609
NZDJPY	1.6928	-7.8205
NZDUSD	-2.3921	-3.1046
USDCAD	-4.0179	-7.1595
USDCHF	3.8689	-11.6213
USDCZK	-3.7582	-15.7310
USDHUF	3.0868	-30.4855
USDJPY	2.4217	-10.8522
USDNOK	-1.1640	-66.5973
USDPLN	-11.2293	-19.6945
USDSEK	25.4519	-105.9012
USDTRY	-457.5881	241.0387
USDZAR	-389.3844	-6.4312

USDMXN	-55.7311	4.9381
XAGUSD	-1.1224	0.5491
XAUUSD	-8.8811	4.3413
COPPER	-0.4516	0.2208
3M	-2.5617	0.0000
AMAZON	-23.9246	0.0000
AIG	-0.6624	0.0000
APPLE	-2.6327	0.0000
AT&T	-0.4091	0.0000
BABA	-2.2826	0.0000
BOEING	-4.3056	0.0000
CHEVRON	-1.5645	0.0000
CISCO	-0.5554	0.0000
CITI	-0.8912	0.0000
COCACOLA	-0.5845	0.0000
EBAY	-0.4324	0.0000
EXXONM	-1.0076	0.0000
FACEBOOK	-2.2864	0.0000
GE	-0.1620	0.0000
GMOTORS	-0.4642	0.0000
GOOGLE	-15.8853	0.0000
IBM	-1.8327	0.0000
INTEL	-0.6197	0.0000

J&J	-1.6584	0.0000
JPMORGAN	-1.4673	0.0000
MCDONALD	-2.0129	0.0000
MICROSFT	-1.3827	0.0000
PFIZER	-0.5192	0.0000
P&G	-1.0328	0.0000
STBUCKS	-0.6534	0.0000
WALMART	-1.1440	0.0000
GOLDMAN	-2.9127	0.0000
UPS	-1.5130	0.0000
ALCOA	-0.5703	0.0000
AMERICANEXP	-1.2886	0.0000
BOA	-0.3955	0.0000
CATERPILLAR	-1.7237	0.0000
SNAP	-0.1562	0.0000
DISNEY	-1.4295	0.0000
FORD	-0.1234	0.0000
FEDEX	-3.0670	0.0000
HARLEY-DAVI	-0.5486	0.0000
HP	-0.2011	0.0000
NIKE	-1.0242	0.0000
PEPSI	-1.4315	0.0000
PM	-1.0471	0.0000

TWITTER	-0.4061	0.0000
VISA	-1.7720	0.0000
PAYPAL	-1.1038	0.0000
TESLA	-4.5095	0.0000
NETFLIX	-4.3865	0.0000
BASF	-4.6122	0.0000
DTELEKOM	-0.8178	0.0000
ALLIANZ	-10.8799	0.0000
BAYER	-4.8400	0.0000
BEIERSDO	-5.7038	0.0000
DAIMLERC	-3.3622	0.0000
DBANK	-0.5943	0.0000
SIEMENS	-6.4425	0.0000
LUFTHANS	-1.3217	0.0000
CECONOMY	-0.4052	0.0000
ADIDAS	-12.1451	0.0000
BMW	-4.8808	0.0000
COMMERZBANK	-0.4881	0.0000
CONTINENTAL	-10.8782	0.0000
HENKEL	-6.3230	0.0000
RWE	-1.2262	0.0000
THYSSEN	-1.1772	0.0000
VOLKSWAGEN	-8.2832	0.0000

BARCLAYS	-1.6354	0.0000
GSK	-13.6742	0.0000
M&S	-2.6342	0.0000
RBS	-2.1734	0.0000
ROLLS-ROYCE	-9.1544	0.0000
RIOTINTO	-33.5322	0.0000
SHELL	-22.4225	0.0000
STAN	-5.9340	0.0000
TESCO	-2.3288	0.0000
UNILEVER	-38.4449	0.0000
VODAFONE	-1.5982	0.0000
SANTANDER	-0.2602	0.0000
TELEFONICA	-0.4333	0.0000
BBVA	-0.3185	0.0000
IBERDOLA	-0.3786	0.0000
REPSOL	-0.9766	0.0000
CAIXABANK	-0.2246	0.0000
ABERTIS	-1.0695	0.0000
GASNATURAL	-1.3479	0.0000
REDELECTRIC	-1.0569	0.0000
GRIFOLS	-1.4481	0.0000
BANKINTER	-0.4534	0.0000
MAPFRE	-0.1526	0.0000

ACS	-2.0993	0.0000
AMADEUS	-4.2732	0.0000
INDITEX	-1.6188	0.0000
ACERINOX	-0.7165	0.0000
AENA	-9.0754	0.0000
BANKIA	-0.1871	0.0000
IAG	-0.4370	0.0000
SACYR	-0.1509	0.0000
TECNICAS	-1.6514	0.0000
ASHR.ETF	-0.3174	-0.0301
DBA.ETF	-0.2182	-0.0207
DBC.ETF	-0.2162	-0.0205
EEM.ETF	-0.5478	-0.0520
EFA.ETF	-0.8468	-0.0803
EWA.ETF	-0.2853	-0.0271
EWV.ETF	-0.6295	-0.0597
EWY.ETF	-0.8214	-0.0779
EWZ.ETF	-0.4293	-0.0407
FXI.ETF	-0.5424	-0.0515
GLD.ETF	-1.4546	-0.1380
HYG.ETF	-1.0896	-0.1034
IVV.ETF	-3.6165	-0.3431
IYR.ETF	-1.0243	-0.0972

OIH.ETF	-0.3231	-0.0307
SLV.ETF	-0.1827	-0.0173
SPY.ETF	-3.5916	-0.3407
SSO.ETF	-1.5300	-0.1452
SVXY.ETF	-0.1782	-0.0169
TBT.ETF	-0.4609	-0.0437
VNQ.ETF	-1.0355	-0.0983
VXX.ETF	-0.3797	-0.0360
XHB.ETF	-0.4988	-0.0473
XLB.ETF	-0.7445	-0.0706
XLE.ETF	-0.9542	-0.0905
XLF.ETF	-0.3549	-0.0337
XLI.ETF	-0.9531	-0.0904
XLP.ETF	-0.6755	-0.0641
XLU.ETF	-0.6722	-0.0638
XLV.ETF	-1.1371	-0.1079
XLY.ETF	-1.4298	-0.1357
AUDCAD.	-2.2571	-3.4524
AUDCHF.	3.3150	-7.1230
AUDJPY.	2.3177	-6.4187
AUDNZD.	-4.4534	-1.9966
AUDUSD.	-2.2415	-1.4137
CADCHF.	2.9419	-7.0306



CADJPY.	1.8415	-6.2478
CHFJPY.	-4.4829	-0.5547
CHFPLN.	-3.5069	1.5717
EURAUD.	-13.7211	5.5454
EURCAD.	-12.2863	4.2621
EURCHF.	-1.4314	-3.8382
EURGBP.	-4.9334	0.9182
EURJPY.	-3.7163	-1.9368
EURNOK.	-50.4863	3.3133
EURNZD.	-17.0950	8.0563
EURPLN.	-3.5055	1.3301
EURSEK.	-24.7721	-34.0492
EURTRY.	-567.8698	333.1777
EURUSD.	-10.1650	5.1382
GBPAUD.	-9.5214	0.5639
GBPCAD.	-8.1714	-0.6252
GBPCHF.	2.6256	-8.3839
GBPJPY.	0.5284	-6.7001
GBPNZD.	-12.6824	2.7784
GBPPLN.	-2.3157	-0.0662
GBPUSD.	-7.1345	1.6495
NZDUSD.	-1.2965	-2.0089
USDCAD.	-1.8263	-4.9678

USDCHF.	5.5270	-9.9632
USDHKD.	9.8117	-43.8257
USDJPY.	4.2609	-9.0130
USDNOK.	12.8043	-52.6263
USDPLN.	-0.4959	-1.3422
USDSEK.	40.7226	-90.6277
USDTRY.	-451.8526	246.7844
GOLD.	-0.9958	0.6759
SILVER.	-7.8795	5.3431
DE30.	-8.9016	-11.6647
US100.	-10.4118	-1.9179
FR40.	-3.8890	-5.0974
US500.	-3.9785	-0.7329
GB100.	-7.7558	-4.7467
US30.	-3.5512	-0.6541
EU50.	-0.2453	-0.3215
ES35.	-0.6842	-0.8971
IT40.	-1.5052	-1.9728
CH20.	-0.5528	-0.9394
BITCOIN	-125.7594	-54.7403

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 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:*

<b>Currency</b>	<b>Bloomberg ticker</b>	<b>Day counting convention (T)</b>	<b>Deposit rate</b>
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 Yield

*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%

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

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

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.

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

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

*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:*

<b>Currency</b>	<b>Bloomberg ticker</b>	<b>Day counting convention (T)</b>	<b>Deposit rate</b>
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