

### Table of Swap Points TMS Trader

Valid from 2018.06.18-2018.06.24. Swap points are published in the minimum quotation step for the financial instrument.

Instrument	Long swap	Short swap
AUDCAD	-2.5318	-5.7174
AUDCHF	2.5454	-8.9663
AUDJPY	1.6001	-8.3437
AUDNZD	-4.9100	-4.3154
AUDUSD	-3.0813	-3.1018
CADCHF	1.5455	-7.7398
CADJPY	0.4664	-6.9507
CHFJPY	-6.3151	-2.5109
CHFPLN	-42.2109	10.3301
EURAUD	-17.0037	4.0240
EURCAD	-13.8244	1.8236
EURCHF	-3.5158	-5.8437
EURCZK	-183.7893	-37.1942
EURGBP	-5.5059	-1.0640
EURHUF	-19.0978	-7.8029
EURJPY	-5.8039	-3.9881
EURNOK	-68.7801	-5.7762
EURNZD	-18.4490	5.0070

EURPLN	-43.7910	8.3031
EURSEK	-40.7177	-44.7115
EURTRY	-343.1927	192.5183
EURUSD	-12.3050	3.3180
EURZAR	-515.0934	85.8863
GBPAUD	-14.6673	0.3245
GBPCAD	-11.1299	-2.1043
GBPCHF	-0.4862	-9.8460
GBPJPY	-2.7154	-8.0721
GBPPLN	-36.9181	-2.2846
GBPUSD	-10.5151	0.6096
NZDJPY	1.8134	-7.8948
NZDUSD	-2.5861	-2.9917
USDCAD	-3.0352	-7.2773
USDCHF	3.6960	-11.7392
USDCZK	-0.8632	-18.1344
USDHUF	2.3193	-25.4444
USDJPY	2.4564	-10.8690
USDNOK	-4.3008	-59.7688
USDPLN	-12.7894	-17.7140
USDSEK	24.5522	-97.9815
USDTRY	-263.9091	134.1267
USDZAR	-353.3149	-16.4572

USDMXN	-62.9403	7.9371
XAGUSD	-1.2392	0.5993
XAUUSD	-9.5682	4.6248
COPPER	-0.5238	0.2532
3M	-2.6097	0.0000
AMAZON	-21.8525	0.0000
AIG	-0.7029	0.0000
APPLE	-2.4059	0.0000
AT&T	-0.4223	0.0000
BABA	-2.6509	0.0000
BOEING	-4.5534	0.0000
CHEVRON	-1.5798	0.0000
CISCO	-0.5637	0.0000
CITI	-0.8450	0.0000
COCACOLA	-0.5618	0.0000
EBAY	-0.4953	0.0000
EXXONM	-1.0274	0.0000
FACEBOOK	-2.4942	0.0000
GE	-0.1695	0.0000
GMOTORS	-0.5591	0.0000
GOOGLE	-14.7644	0.0000
IBM	-1.8517	0.0000
INTEL	-0.7019	0.0000

J&J	-1.5613	0.0000
JPMORGAN	-1.3737	0.0000
MCDONALD	-2.1196	0.0000
MICROSFT	-1.2763	0.0000
PFIZER	-0.4630	0.0000
P&G	-0.9851	0.0000
STBUCKS	-0.7272	0.0000
WALMART	-1.0654	0.0000
GOLDMAN	-2.9558	0.0000
UPS	-1.4872	0.0000
ALCOA	-0.5773	0.0000
AMERICANEXP	-1.2546	0.0000
BOA	-0.3727	0.0000
CATERPILLAR	-1.9101	0.0000
SNAP	-0.1788	0.0000
DISNEY	-1.3869	0.0000
FORD	-0.1513	0.0000
FEDEX	-3.3692	0.0000
HARLEY-DAVI	-0.5850	0.0000
HP	-0.2028	0.0000
NIKE	-0.9658	0.0000
PEPSI	-1.3704	0.0000
PM	-1.0429	0.0000

TWITTER	-0.5832	0.0000
VISA	-1.7194	0.0000
PAYPAL	-1.0866	0.0000
TESLA	-4.5610	0.0000
NETFLIX	-4.9810	0.0000
BASF	-5.0693	0.0000
DTELEKOM	-0.8011	0.0000
ALLIANZ	-10.4598	0.0000
BAYER	-5.7735	0.0000
BEIERSDO	-5.7922	0.0000
DAIMLERC	-3.5973	0.0000
DBANK	-0.5567	0.0000
SIEMENS	-6.9109	0.0000
LUFTHANS	-1.3400	0.0000
CECONOMY	-0.5044	0.0000
ADIDAS	-11.4179	0.0000
BMW	-4.9496	0.0000
COMMERZBANK	-0.5212	0.0000
CONTINENTAL	-12.9974	0.0000
HENKEL	-6.3381	0.0000
RWE	-1.1689	0.0000
THYSSEN	-1.3418	0.0000
VOLKSWAGEN	-9.0503	0.0000

BARCLAYS	-1.6151	0.0000
GSK	-12.7555	0.0000
M&S	-2.4595	0.0000
RBS	-2.1062	0.0000
ROLLS-ROYCE	-7.6125	0.0000
RIOTINTO	-34.9241	0.0000
SHELL	-20.8474	0.0000
STAN	-5.8457	0.0000
TESCO	-2.1086	0.0000
UNILEVER	-33.4497	0.0000
VODAFONE	-1.5380	0.0000
SANTANDER	-0.2747	0.0000
TELEFONICA	-0.4361	0.0000
BBVA	-0.3503	0.0000
IBERDOLA	-0.3884	0.0000
REPSOL	-0.9666	0.0000
CAIXABANK	-0.2177	0.0000
ABERTIS	-1.0714	0.0000
GASNATURAL	-1.2682	0.0000
REDELECTRIC	-1.0379	0.0000
GRIFOLS	-1.5695	0.0000
BANKINTER	-0.4983	0.0000
MAPFRE	-0.1487	0.0000

ACS	-2.1020	0.0000
AMADEUS	-4.1958	0.0000
INDITEX	-1.7365	0.0000
ACERINOX	-0.6697	0.0000
AENA	-9.1641	0.0000
BANKIA	-0.1921	0.0000
IAG	-0.4795	0.0000
SACYR	-0.1432	0.0000
TECNICAS	-1.4883	0.0000
ASHR.ETF	-0.3702	-0.0335
DBA.ETF	-0.2350	-0.0213
DBC.ETF	-0.2198	-0.0199
EEM.ETF	-0.5763	-0.0522
EFA.ETF	-0.8916	-0.0807
EWA.ETF	-0.2864	-0.0259
EWV.ETF	-0.5738	-0.0520
EWY.ETF	-0.8947	-0.0810
EWZ.ETF	-0.4203	-0.0381
FXI.ETF	-0.5960	-0.0540
GLD.ETF	-1.5450	-0.1399
HYG.ETF	-1.0969	-0.0993
IVV.ETF	-3.5708	-0.3233
IYR.ETF	-1.0050	-0.0910

OIH.ETF	-0.3282	-0.0297
SLV.ETF	-0.1988	-0.0180
SPY.ETF	-3.5304	-0.3195
SSO.ETF	-1.4844	-0.1344
SVXY.ETF	-0.1773	-0.0161
TBT.ETF	-0.4689	-0.0425
VNQ.ETF	-1.0144	-0.0918
VXX.ETF	-0.4031	-0.0365
XHB.ETF	-0.5204	-0.0471
XLB.ETF	-0.7610	-0.0689
XLE.ETF	-0.9437	-0.0854
XLF.ETF	-0.3496	-0.0317
XLI.ETF	-0.9567	-0.0866
XLP.ETF	-0.6563	-0.0594
XLU.ETF	-0.6307	-0.0571
XLV.ETF	-1.0887	-0.0986
XLY.ETF	-1.4278	-0.1293
AUDCAD.	-0.8984	-4.0839
AUDCHF.	3.7820	-7.7297
AUDJPY.	2.9716	-6.9722
AUDNZD.	-3.1245	-2.5298
AUDUSD.	-1.8405	-1.8611
CADCHF.	2.8071	-6.4779



CADJPY.	1.8657	-5.5513
CHFJPY.	-4.4667	-0.6624
CHFPLN.	-3.6068	1.6476
EURAUD.	-14.4076	6.6202
EURCAD.	-11.2799	4.3682
EURCHF.	-1.5893	-3.9173
EURGBP.	-4.0569	0.3850
EURJPY.	-3.6675	-1.8516
EURNOK.	-53.0285	9.9771
EURNZD.	-15.6676	7.7887
EURPLN.	-3.6689	1.5406
EURSEK.	-23.6332	-27.6245
EURTRY.	-338.6201	197.0929
EURUSD.	-10.3722	5.2509
GBPAUD.	-11.7220	3.2700
GBPCAD.	-8.2432	0.7827
GBPCHF.	1.6993	-7.6604
GBPJPY.	-0.2916	-5.6481
GBPNZD.	-12.8228	4.2979
GBPPLN.	-2.8863	0.5774
GBPUSD.	-8.3223	2.8024
NZDUSD.	-1.4281	-1.8336
USDCAD.	-0.8411	-5.0832

USDCHF.	5.3570	-10.0781
USDHKD.	11.9911	-46.6566
USDJPY.	4.2986	-9.0268
USDNOK.	9.2806	-46.1854
USDPLN.	-0.6666	-1.1589
USDSEK.	39.2831	-83.2482
USDTRY.	-259.9679	138.0689
GOLD.	-1.1010	0.7376
SILVER.	-8.5011	5.6920
DE30.	-9.2924	-12.1361
US100.	-10.2299	-1.8410
FR40.	-3.9319	-5.1362
US500.	-3.9147	-0.7045
GB100.	-7.2583	-5.1620
US30.	-3.5273	-0.6348
EU50.	-0.2506	-0.3273
ES35.	-0.7022	-0.9193
IT40.	-1.5905	-2.0775
CH20.	-0.5259	-0.8978
BITCOIN	-126.2135	-54.6950

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 CURRENCY	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