

### Table of Swap Points TMS Trader

Valid from 2018.05.14-2018.05.20. Swap points are published in the minimum quotation step for the financial instrument.

Instrument	Long swap	Short swap
AUDCAD	-2,8104	-5,3541
AUDCHF	2,2640	-8,7634
AUDJPY	1,1029	-7,8814
AUDNZD	-5,1268	-4,3734
AUDUSD	-3,0615	-3,1666
CADCHF	1,4792	-7,8978
CADJPY	0,1907	-6,8671
CHFJPY	-6,3932	-2,2835
CHFPLN	-38,4524	8,0170
EURAUD	-16,4390	3,2175
EURCAD	-13,5063	1,4017
EURCHF	-3,4928	-6,1542
EURCZK	-182,0402	-36,8403
EURGBP	-5,5295	-1,0893
EURHUF	-17,5267	-10,9569
EURJPY	-6,0158	-4,0107
EURNOK	-72,1146	-5,8553
EURNZD	-18,3271	4,2115

EURPLN	-40,7323	5,4497
EURSEK	-39,4137	-46,2759
EURTRY	-262,0898	119,8007
EURUSD	-11,9451	2,7283
EURZAR	-499,6859	85,0234
GBPAUD	-13,8657	-0,6360
GBPCAD	-10,7137	-2,5395
GBPCHF	-0,3571	-10,2120
GBPJPY	-2,8718	-8,0919
GBPPLN	-33,3486	-5,3403
GBPUSD	-9,9401	-0,1405
NZDJPY	1,3331	-7,4708
NZDUSD	-2,5297	-3,1093
USDCAD	-3,4039	-6,5953
USDCHF	3,2489	-11,2192
USDCZK	-2,0694	-16,0301
USDHUF	1,6094	-25,1733
USDJPY	1,7348	-10,0137
USDNOK	-10,8852	-53,5472
USDPLN	-12,0465	-17,1176
USDSEK	20,0278	-90,8570
USDTRY	-192,1008	73,6954
USDZAR	-341,4419	-3,7535

USDMXN	-58,5339	7,4905
XAGUSD	-1,1388	0,5049
XAUUSD	-9,0219	3,9982
COPPER	-0,4696	0,2081
3M	-2,5168	0,0000
AMAZON	-19,6734	0,0000
AIG	-0,6487	0,0000
APPLE	-2,3147	0,0000
AT&T	-0,3962	0,0000
BABA	-2,3846	0,0000
BOEING	-4,2012	0,0000
CHEVRON	-1,5934	0,0000
CISCO	-0,5638	0,0000
CITI	-0,8944	0,0000
COCACOLA	-0,5172	0,0000
EBAY	-0,4695	0,0000
EXXONM	-0,9974	0,0000
FACEBOOK	-2,2952	0,0000
GE	-0,1791	0,0000
GMOTORS	-0,4527	0,0000
GOOGLE	-13,5436	0,0000
IBM	-1,7692	0,0000
INTEL	-0,6710	0,0000

J&J	-1,5619	0,0000
JPMORGAN	-1,3978	0,0000
MCDONALD	-2,0298	0,0000
MICROSFT	-1,1993	0,0000
PFIZER	-0,4359	0,0000
P&G	-0,9004	0,0000
STBUCKS	-0,7028	0,0000
WALMART	-1,0233	0,0000
GOLDMAN	-2,9810	0,0000
UPS	-1,4172	0,0000
ALCOA	-0,6621	0,0000
AMERICANEXP	-1,2448	0,0000
BOA	-0,3795	0,0000
CATERPILLAR	-1,9005	0,0000
SNAP	-0,1354	0,0000
DISNEY	-1,2531	0,0000
FORD	-0,1372	0,0000
FEDEX	-3,0801	0,0000
HARLEY-DAVI	-0,5004	0,0000
HP	-0,2169	0,0000
NIKE	-0,8397	0,0000
PEPSI	-1,1959	0,0000
PM	-0,9968	0,0000

TWITTER	-0,4017	0,0000
VISA	-1,6179	0,0000
PAYPAL	-0,9721	0,0000
TESLA	-3,6950	0,0000
NETFLIX	-4,0058	0,0000
BASF	-5,0606	0,0000
DTELEKOM	-0,8321	0,0000
ALLIANZ	-11,1450	0,0000
BAYER	-5,9922	0,0000
BEIERSDO	-5,6747	0,0000
DAIMLERC	-3,9078	0,0000
DBANK	-0,6793	0,0000
SIEMENS	-6,7311	0,0000
LUFTHANS	-1,4656	0,0000
CECONOMY	-0,5240	0,0000
ADIDAS	-10,9880	0,0000
BMW	-5,3705	0,0000
COMMERZBANK	-0,6296	0,0000
CONTINENTAL	-12,9930	0,0000
HENKEL	-6,1258	0,0000
RWE	-1,1618	0,0000
THYSSEN	-1,3512	0,0000
VOLKSWAGEN	-9,8235	0,0000

BARCLAYS	-1,7682	0,0000
GSK	-12,1970	0,0000
M&S	-2,3798	0,0000
RBS	-2,4134	0,0000
ROLLS-ROYCE	-6,8082	0,0000
RIOTINTO	-34,6695	0,0000
SHELL	-21,7234	0,0000
STAN	-6,2784	0,0000
TESCO	-2,0290	0,0000
UNILEVER	-34,2218	0,0000
VODAFONE	-1,7214	0,0000
SANTANDER	-0,3210	0,0000
TELEFONICA	-0,4846	0,0000
BBVA	-0,3998	0,0000
IBERDOLA	-0,3799	0,0000
REPSOL	-0,9654	0,0000
CAIXABANK	-0,2511	0,0000
ABERTIS	-1,0649	0,0000
GASNATURAL	-1,2742	0,0000
REDELECTRIC	-1,0069	0,0000
GRIFOLS	-1,4709	0,0000
BANKINTER	-0,5331	0,0000
MAPFRE	-0,1696	0,0000

ACS	-2,1474	0,0000
AMADEUS	-3,7345	0,0000
INDITEX	-1,5707	0,0000
ACERINOX	-0,6926	0,0000
AENA	-10,3722	0,0000
BANKIA	-0,2174	0,0000
IAG	-0,4598	0,0000
SACYR	-0,1571	0,0000
TECNICAS	-1,5001	0,0000
ASHR.ETF	-0,3758	-0,0495
DBA.ETF	-0,2327	-0,0306
DBC.ETF	-0,2195	-0,0289
EEM.ETF	-0,5814	-0,0765
EFA.ETF	-0,8809	-0,1159
EWA.ETF	-0,2803	-0,0369
EWV.ETF	-0,5899	-0,0776
EWY.ETF	-0,9204	-0,1211
EWZ.ETF	-0,5024	-0,0661
FXI.ETF	-0,5910	-0,0778
GLD.ETF	-1,5344	-0,2019
HYG.ETF	-1,0521	-0,1384
IVV.ETF	-3,3691	-0,4433
IYR.ETF	-0,9528	-0,1254

OIH.ETF	-0,3442	-0,0453
SLV.ETF	-0,1927	-0,0254
SPY.ETF	-3,3464	-0,4402
SSO.ETF	-1,3768	-0,1811
SVXY.ETF	-0,1626	-0,0214
TBT.ETF	-0,4626	-0,0609
VNQ.ETF	-0,9605	-0,1264
VXX.ETF	-0,4398	-0,0579
XHB.ETF	-0,4874	-0,0641
XLB.ETF	-0,7228	-0,0951
XLE.ETF	-0,9420	-0,1239
XLF.ETF	-0,3467	-0,0456
XLI.ETF	-0,9173	-0,1207
XLP.ETF	-0,6079	-0,0800
XLU.ETF	-0,6186	-0,0814
XLV.ETF	-1,0192	-0,1341
XLY.ETF	-1,2877	-0,1694
AUDCAD.	-1,2045	-3,7479
AUDCHF.	3,5218	-7,5056
AUDJPY.	2,4815	-6,5028
AUDNZD.	-3,3173	-2,5638
AUDUSD.	-1,8033	-1,9084
CADCHF.	2,7843	-6,5925



CADJPY.	1,6212	-5,4365
CHFJPY.	-4,5665	-0,4567
CHFPLN.	-3,2559	1,3916
EURAUD.	-13,7946	5,8621
EURCAD.	-10,9579	3,9503
EURCHF.	-1,4969	-4,1583
EURGBP.	-4,0698	0,3704
EURJPY.	-3,8282	-1,8231
EURNOK.	-56,1478	10,1137
EURNZD.	-15,4559	7,0830
EURPLN.	-3,3672	1,2512
EURSEK.	-22,2771	-29,1369
EURTRY.	-257,7746	124,1163
EURUSD.	-9,9486	4,7247
GBPAUD.	-10,8878	2,3423
GBPCAD.	-7,8439	0,3306
GBPCHF.	1,8906	-7,9643
GBPJPY.	-0,4084	-5,6283
GBPNZD.	-12,3643	3,3573
GBPPLN.	-2,5399	0,2613
GBPUSD.	-7,6919	2,1078
NZDUSD.	-1,3710	-1,9506
USDCAD.	-1,2765	-4,4678

USDCHF.	4,9150	-9,5531
USDHKD.	15,0449	-49,2770
USDJPY.	3,5609	-8,1876
USDNOK.	2,4436	-40,2163
USDPLN.	-0,6153	-1,1222
USDSEK.	34,3331	-76,5494
USDTRY.	-188,4996	77,2968
GOLD.	-1,0000	0,6439
SILVER.	-7,9217	5,0986
DE30.	-9,3777	-12,2528
US100.	-9,5389	-2,0970
FR40.	-3,9525	-5,1651
US500.	-3,7369	-0,8216
GB100.	-7,3752	-5,2745
US30.	-3,4035	-0,7482
EU50.	-0,2548	-0,3330
ES35.	-0,7385	-0,9658
IT40.	-1,7118	-2,2370
CH20.	-0,5548	-0,9463
BITCOIN	-158,7659	-76,0371

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