

### Table of Swap Points TMS Trader

Valid from 2018.07.02-2018.07.08. Swap points are published in the minimum quotation step for the financial instrument.

Instrument	Long swap	Short swap
AUDCAD	-2,2909	-5,4452
AUDCHF	2,4972	-8,6597
AUDJPY	1,6541	-7,8859
AUDNZD	-4,7626	-4,3992
AUDUSD	-2,966	-2,7617
CADCHF	1,3181	-7,7313
CADJPY	0,3036	-6,7957
CHFJPY	-6,5567	-2,5733
CHFPLN	-42,4318	8,7452
EURAUD	-16,7092	4,0623
EURCAD	-13,7857	1,3851
EURCHF	-3,7076	-6,1635
EURCZK	-20,2574	-3,287
EURGBP	-5,7462	-1,2342
EURHUF	-20,4708	-16,7229
EURJPY	-5,9292	-4,0664
EURNOK	-68,539	-6,7361
EURNZD	-18,9681	4,293

EURPLN	-43,4308	6,3851
EURSEK	-41,3517	-47,4537
EURTRY	-337,835	188,752
EURUSD	-12,4024	3,2177
EURZAR	-549,07	93,5305
GBPAUD	-14,1344	0,2305
GBPCAD	-10,9701	-2,6668
GBPCHF	-0,7158	-10,1561
GBPJPY	-2,8238	-8,1551
GBPPLN	-35,8912	-4,8964
GBPUSD	-10,5188	0,4257
NZDJPY	1,4522	-7,5318
NZDUSD	-2,7716	-2,8094
USDCAD	-2,8549	-7,5041
USDCHF	3,5843	-11,8414
USDCZK	-2,1703	-17,5561
USDHUF	1,7307	-33,055
USDJPY	2,4617	-10,8012
USDNOK	-3,1758	-59,6717
USDPLN	-11,5897	-19,3977
USDSEK	25,6713	-99,9641
USDTRY	-258,376	131,4308
USDZAR	-377,542	-10,7361

USDMXN	-58,8283	5,9846
XAGUSD	-1,1881	0,5767
XAUUSD	-9,2952	4,5096
COPPER	-0,4901	0,2378
3M	-2,5084	0
AMAZON	-21,6611	0
AIG	-0,6759	0
APPLE	-2,3322	0
AT&T	-0,4094	0
BABA	-2,364	0
BOEING	-4,2786	0
CHEVRON	-1,6116	0
CISCO	-0,5487	0
CITI	-0,8535	0
COCACOLA	-0,5592	0
EBAY	-0,4623	0
EXXONM	-1,056	0
FACEBOOK	-2,4775	0
GE	-0,1735	0
GMOTORS	-0,5026	0
GOOGLE	-14,398	0
IBM	-1,7815	0
INTEL	-0,634	0

J&J	-1,5473	0
JPMORGAN	-1,3302	0
MCDONALD	-1,9983	0
MICROSFT	-1,2573	0
PFIZER	-0,4627	0
P&G	-0,9953	0
STBUCKS	-0,6229	0
WALMART	-1,0922	0
GOLDMAN	-2,8125	0
UPS	-1,3546	0
ALCOA	-0,5989	0
AMERICANEXP	-1,2496	0
BOA	-0,3596	0
CATERPILLAR	-1,7303	0
SNAP	-0,167	0
DISNEY	-1,3375	0
FORD	-0,1412	0
FEDEX	-2,8956	0
HARLEY-DAVI	-0,5365	0
HP	-0,1863	0
NIKE	-1,0164	0
PEPSI	-1,3883	0
PM	-1,0295	0

TWITTER	-0,557	0
VISA	-1,6916	0
PAYPAL	-1,0619	0
TESLA	-4,3706	0
NETFLIX	-4,9895	0
BASF	-4,7525	0
DTELEKOM	-0,7719	0
ALLIANZ	-10,1556	0
BAYER	-5,5089	0
BEIERSDO	-5,6382	0
DAIMLERC	-3,2842	0
DBANK	-0,5328	0
SIEMENS	-6,6199	0
LUFTHANS	-1,1952	0
CECONOMY	-0,4551	0
ADIDAS	-10,7757	0
BMW	-4,5917	0
COMMERZBANK	-0,4771	0
CONTINENTAL	-11,4572	0
HENKEL	-6,2917	0
RWE	-1,1504	0
THYSSEN	-1,201	0
VOLKSWAGEN	-8,3129	0

BARCLAYS	-1,5303	0
GSK	-12,4998	0
M&S	-2,408	0
RBS	-2,0726	0
ROLLS-ROYCE	-8,0011	0
RIOTINTO	-33,8187	0
SHELL	-21,3839	0
STAN	-5,6456	0
TESCO	-2,1129	0
UNILEVER	-34,2421	0
VODAFONE	-1,507	0
SANTANDER	-0,2661	0
TELEFONICA	-0,4228	0
BBVA	-0,348	0
IBERDOLA	-0,3852	0
REPSOL	-0,9737	0
CAIXABANK	-0,2124	0
ABERTIS	-1,0735	0
GASNATURAL	-1,335	0
REDELECTRIC	-1,0185	0
GRIFOLS	-1,5023	0
BANKINTER	-0,4833	0
MAPFRE	-0,1493	0

ACS	-1,9954	0
AMADEUS	-3,93	0
INDITEX	-1,6983	0
ACERINOX	-0,6537	0
AENA	-8,9915	0
BANKIA	-0,1856	0
IAG	-0,4355	0
SACYR	-0,1365	0
TECNICAS	-1,6093	0
ASHR.ETF	-0,3381	-0,0302
DBA.ETF	-0,2298	-0,0205
DBC.ETF	-0,2252	-0,0201
EEM.ETF	-0,5529	-0,0494
EFA.ETF	-0,8542	-0,0762
EWA.ETF	-0,288	-0,0257
EWV.ETF	-0,6009	-0,0537
EWY.ETF	-0,8623	-0,077
EWZ.ETF	-0,4087	-0,0365
FXI.ETF	-0,5471	-0,0489
GLD.ETF	-1,5129	-0,135
HYG.ETF	-1,0846	-0,0968
IVV.ETF	-3,4821	-0,3109
IYR.ETF	-1,0267	-0,0917

OIH.ETF	-0,3351	-0,0299
SLV.ETF	-0,193	-0,0172
SPY.ETF	-3,4585	-0,3087
SSO.ETF	-1,4179	-0,1266
SVXY.ETF	-0,1624	-0,0145
TBT.ETF	-0,4585	-0,0409
VNQ.ETF	-1,038	-0,0927
VXX.ETF	-0,472	-0,0421
XHB.ETF	-0,5045	-0,045
XLB.ETF	-0,7404	-0,0661
XLE.ETF	-0,9688	-0,0865
XLF.ETF	-0,3387	-0,0302
XLI.ETF	-0,9135	-0,0816
XLP.ETF	-0,6567	-0,0586
XLU.ETF	-0,6621	-0,0591
XLV.ETF	-1,0638	-0,095
XLY.ETF	-1,3935	-0,1244
AUDCAD.	-0,6738	-3,8278
AUDCHF.	3,7153	-7,4415
AUDJPY.	3,0137	-6,5263
AUDNZD.	-2,9425	-2,5789
AUDUSD.	-1,7386	-1,5343
CADCHF.	2,5734	-6,476



CADJPY.	1,7046	-5,3945
CHFJPY.	-4,6966	-0,7131
CHFPLN.	-3,6144	1,5035
EURAUD.	-14,0743	6,6973
EURCAD.	-11,2287	3,9421
EURCHF.	-1,7815	-4,2374
EURGBP.	-4,282	0,2301
EURJPY.	-3,7796	-1,9168
EURNOK.	-52,6914	9,1137
EURNZD.	-16,0904	7,171
EURPLN.	-3,6164	1,3653
EURSEK.	-23,9402	-30,0397
EURTRY.	-333,338	193,2495
EURUSD.	-10,4619	5,1581
GBPAUD.	-11,1761	3,1889
GBPCAD.	-8,0995	0,2039
GBPCHF.	1,4465	-7,9937
GBPJPY.	-0,4105	-5,7417
GBPNZD.	-13,0194	3,3204
GBPPLN.	-2,7734	0,3264
GBPUSD.	-8,3403	2,6043
NZDUSD.	-1,648	-1,6856
USDCAD.	-0,6588	-5,3079

USDCHF.	5,2385	-10,1873
USDHKD.	-25,0612	-11,5501
USDJPY.	4,3079	-8,9549
USDNOK.	10,4346	-46,0588
USDPLN.	-0,5349	-1,3155
USDSEK.	40,625	-85,0076
USDTRY.	-254,518	135,2899
GOLD.	-1,0551	0,7098
SILVER.	-8,2547	5,5503
DE30.	-8,8278	-11,4981
US100.	-9,9097	-1,7712
FR40.	-3,8022	-4,9534
US500.	-3,8226	-0,6833
GB100.	-7,1934	-5,1357
US30.	-3,4052	-0,6086
EU50.	-0,2424	-0,3158
ES35.	-0,6848	-0,8933
IT40.	-1,5379	-2,0039
CH20.	-0,5231	-0,8907
BITCOIN	-123,669	-53,6652

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