

### Table of Swap Points TMS Trader

Valid from 2018.08.06- 2018.08.12. Swap points are published in the minimum quotation step for the financial instrument.

Instrument	Long swap	Short swap
AUDCAD	-3,394	-4,9443
AUDCHF	2,1057	-8,4237
AUDJPY	0,8916	-7,7727
AUDNZD	-5,6987	-4,1146
AUDUSD	-3,5541	-2,5682
CADCHF	1,6997	-8,0118
CADJPY	0,3801	-7,2471
CHFJPY	-6,5534	-2,3296
CHFPLN	-40,6012	9,1732
EURAUD	-15,9377	2,8229
EURCAD	-13,872	1,755
EURCHF	-3,2606	-5,9138
EURCZK	-21,5198	-0,9266
EURGBP	-6,316	-0,5714
EURHUF	-14,5942	-12,1077
EURJPY	-5,9333	-4,0391
EURNOK	-68,0986	-11,3961
EURNZD	-18,6772	4,384
EURPLN	-41,3876	6,043
EURSEK	-39,5072	-46,3856
EURTRY	-380,7449	216,4269
EURUSD	-12,1415	3,2764
EURZAR	-527,7628	91,2347
GBPAUD	-12,179	-2,4361
GBPCAD	-10,0777	-3,4218
GBPCHF	0,5353	-10,7559
GBPJPY	-1,9669	-9,1403
GBPPLN	-30,8506	-8,5362
GBPUSD	-9,4043	-0,4688
NZDJPY	1,375	-7,6055
NZDUSD	-2,7334	-2,8085
USDCAD	-3,2519	-7,0827
USDCHF	3,8697	-11,6927
USDCZK	-3,6969	-15,4724
USDHUF	6,0025	-28,7938
USDJPY	2,3489	-10,849

USDNOK	-3,4371	-64,4004
USDPLN	-10,9521	-19,2071
USDSEK	25,7463	-99,0427
USDTRY	-294,3637	152,8678
USDZAR	-366,404	-9,6752
USDMXN	-53,9957	5,0861
XAGUSD	-1,135	0,5551
XAUUSD	-8,9528	4,3761
COPPER	-0,4518	0,2208
3M	-2,6368	0
AMAZON	-23,1882	0
AIG	-0,6824	0
APPLE	-2,6456	0
AT&T	-0,4104	0
BABA	-2,3003	0
BOEING	-4,4335	0
CHEVRON	-1,5771	0
CISCO	-0,5447	0
CITI	-0,9207	0
COCACOLA	-0,593	0
EBAY	-0,4282	0
EXXONM	-1,0197	0
FACEBOOK	-2,2612	0
GE	-0,1671	0
GMOTORS	-0,4801	0
GOOGLE	-15,7414	0
IBM	-1,8787	0
INTEL	-0,6312	0
J&J	-1,6784	0
JPMORGAN	-1,4892	0
MCDONALD	-1,9868	0
MICROSFT	-1,3742	0
PFIZER	-0,5156	0
P&G	-1,0473	0
STBUCKS	-0,6643	0
WALMART	-1,1397	0
GOLDMAN	-2,972	0
UPS	-1,5156	0
ALCOA	-0,5435	0
AMERICANEXP	-1,282	0
BOA	-0,4007	0
CATERPILLAR	-1,7615	0
SNAP	-0,1619	0
DISNEY	-1,4509	0
FORD	-0,1276	0
FEDEX	-3,095	0

HARLEY-DAVI	-0,5605	0
HP	-0,2031	0
NIKE	-1,0015	0
PEPSI	-1,4794	0
PM	-1,1046	0
TWITTER	-0,4063	0
VISA	-1,7783	0
PAYPAL	-1,0836	0
TESLA	-4,4287	0
NETFLIX	-4,3636	0
BASF	-4,6795	0
DTELEKOM	-0,8286	0
ALLIANZ	-10,9247	0
BAYER	-5,5457	0
BEIERSDO	-5,9018	0
DAIMLERC	-3,3895	0
DBANK	-0,6284	0
SIEMENS	-6,4853	0
LUFTHANS	-1,3442	0
CECONOMY	-0,4085	0
ADIDAS	-11,0255	0
BMW	-4,8386	0
COMMERZBANK	-0,5185	0
CONTINENTAL	-10,8273	0
HENKEL	-6,4148	0
RWE	-1,2311	0
THYSSEN	-1,2556	0
VOLKSWAGEN	-8,3413	0
BARCLAYS	-1,6589	0
GSK	-13,8316	0
M&S	-2,6098	0
RBS	-2,2126	0
ROLLS-ROYCE	-9,5935	0
RIOTINTO	-34,4688	0
SHELL	-22,3776	0
STAN	-6,0527	0
TESCO	-2,2894	0
UNILEVER	-38,6301	0
VODAFONE	-1,637	0
SANTANDER	-0,2717	0
TELEFONICA	-0,4427	0
BBVA	-0,3508	0
IBERDOLA	-0,3819	0
REPSOL	-0,9848	0
CAIXABANK	-0,228	0
ABERTIS	-1.0685	0

GASNATURAL	-1,3424	0
REDELECTRIC	-1,0722	0
GRIFOLS	-1,4887	0
BANKINTER	-0,4671	0
MAPFRE	-0,1531	0
ACS	-2,1416	0
AMADEUS	-4,1689	0
INDITEX	-1,6181	0
ACERINOX	-0,7155	0
AENA	-9,1107	0
BANKIA	-0,1919	0
IAG	-0,4428	0
SACYR	-0,159	0
TECNICAS	-1,705	0
ASHR.ETF	-0,3141	-0,0289
DBA.ETF	-0,2227	-0,0205
DBC.ETF	-0,2183	-0,0201
EEM.ETF	-0,5622	-0,0517
EFA.ETF	-0,8666	-0,0796
EWA.ETF	-0,289	-0,0266
EWV.ETF	-0,6598	-0,0606
EWY.ETF	-0,8388	-0,0771
EWZ.ETF	-0,4775	-0,0439
FXI.ETF	-0,5359	-0,0492
GLD.ETF	-1,4616	-0,1343
HYG.ETF	-1,0931	-0,1004
IVV.ETF	-3,6332	-0,3338
IYR.ETF	-1,0448	-0,096
OIH.ETF	-0,3244	-0,0298
SLV.ETF	-0,1844	-0,017
SPY.ETF	-3,608	-0,3315
SSO.ETF	-1,5413	-0,1416
SVXY.ETF	-0,1778	-0,0163
TBT.ETF	-0,4729	-0,0435
VNQ.ETF	-1,0562	-0,097
VXX.ETF	-0,3858	-0,0355
XHB.ETF	-0,5023	-0,0462
XLB.ETF	-0,7539	-0,0693
XLE.ETF	-0,9572	-0,0879
XLF.ETF	-0,3576	-0,0329
XLI.ETF	-0,9646	-0,0886
XLP.ETF	-0,6907	-0,0635
XLU.ETF	-0,6776	-0,0623
XLV.ETF	-1,1425	-0,105
XLY.ETF	-1,4224	-0,1307

AUDCAD.	-1,7905	-3,3408
AUDCHF.	3,3323	-7,197
AUDJPY.	2,2632	-6,4011
AUDNZD.	-3,8702	-2,2859
AUDUSD.	-2,3214	-1,3355
CADCHF.	2,9745	-6,7368
CADJPY.	1,8056	-5,8215
CHFJPY.	-4,6898	-0,4659
CHFPLN.	-3,4456	1,5322
EURAUD.	-13,3319	5,4288
EURCAD.	-11,3649	4,2622
EURCHF.	-1,3426	-3,9958
EURGBP.	-4,8401	0,9045
EURJPY.	-3,7887	-1,8945
EURNOK.	-52,1996	4,5055
EURNZD.	-15,8183	7,2432
EURPLN.	-3,4315	1,3117
EURSEK.	-22,33	-29,206
EURTRY.	-375,758	221,4155
EURUSD.	-10,2142	5,2038
GBPAUD.	-9,2768	0,4664
GBPCAD.	-7,2854	-0,6291
GBPCHF.	2,6715	-8,6196
GBPJPY.	0,4217	-6,7516
GBPNZD.	-11,5137	1,9547
GBPPLN.	-2,2974	-0,0657
GBPUSD.	-7,2577	1,6778
NZDUSD.	-1,61	-1,6851
USDCAD.	-1,084	-4,9146
USDCHF.	5,5281	-10,0343
USDHKD.	7,6309	-41,6427
USDJPY.	4,2033	-8,9945
USDNOK.	10,3112	-50,6499
USDPLN.	-0,4836	-1,309
USDSEK.	40,5996	-84,187
USDTRY.	-290,054	157,1793
GOLD.	-1,007	0,6831
SILVER.	-7,9431	5,386
DE30.	-9,0653	-11,8682
US100.	-10,4412	-1,8927
FR40.	-3,9464	-5,1671
US500.	-4,0021	-0,7255
GB100.	-7,7262	-4,7311
US30.	-3,5826	-0,6494
EU50.	-0,2508	-0,3284
ES35.	-0,7001	-0,9189

IT40.	-1,5547	-2,0362
CH20.	-0,5637	-0,9575

BITCOIN	-135,8187	-59,1047
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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:

<b>TMS EUROPE</b>	
<b>The amount of interest rate commission in order to swap points calculation</b>	
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