

### Table of Swap Points TMS Trader

Valid from 2018.07.23-2018.07.29. Swap points are published in the minimum quotation step for the financial instrument.

Instrument	Long swap	Short swap
AUDCAD	-3,2446	-5,0564
AUDCHF	2,2133	-8,5583
AUDJPY	1,2795	-8,1111
AUDNZD	-5,3447	-4,5305
AUDUSD	-3,2486	-2,8787
CADCHF	1,7495	-7,9113
CADJPY	0,7275	-7,3467
CHFJPY	-6,2686	-2,6291
CHFPLN	-39,4282	7,7067
EURAUD	-16,8142	3,5124
EURCAD	-14,5732	2,3507
EURCHF	-3,6274	-5,7234
EURCZK	-19,9765	-2,3719
EURGBP	-5,7532	-1,1574
EURHUF	-18,8361	-11,1427
EURJPY	-5,9585	-4,0808
EURNOK	-70,7936	-6,0995
EURNZD	-18,9963	4,3919

EURPLN	-41,3999	5,5218
EURSEK	-40,5110	-45,9783
EURTRY	-357,8966	204,6807
EURUSD	-12,3179	3,3150
EURZAR	-539,9890	93,2722
GBPAUD	-14,2189	-0,5586
GBPCAD	-11,8285	-1,7425
GBPCHF	-0,6597	-9,7243
GBPJPY	-2,8656	-8,2782
GBPPLN	-33,7411	-6,1133
GBPUSD	-10,3804	0,3885
NZDJPY	1,4289	-7,7759
NZDUSD	-2,7609	-2,9314
USDCAD	-3,5796	-6,6846
USDCHF	3,5962	-11,4508
USDCZK	-2,1493	-16,6489
USDHUF	2,7088	-27,9494
USDJPY	2,4073	-10,8334
USDNOK	-5,4385	-59,1564
USDPLN	-10,4449	-19,7123
USDSEK	25,0460	-97,7482
USDTRY	-273,6326	143,3725
USDZAR	-370,1989	-9,7761

USDMXN	-56,0353	5,7929
XAGUSD	-1,1435	0,5592
XAUUSD	-9,0861	4,4413
COPPER	-0,4552	0,2226
3M	-2,5623	0,0000
AMAZON	-23,0195	0,0000
AIG	-0,6767	0,0000
APPLE	-2,4325	0,0000
AT&T	-0,3948	0,0000
BABA	-2,3754	0,0000
BOEING	-4,5039	0,0000
CHEVRON	-1,5514	0,0000
CISCO	-0,5329	0,0000
CITI	-0,8783	0,0000
COCACOLA	-0,5746	0,0000
EBAY	-0,4339	0,0000
EXXONM	-1,0331	0,0000
FACEBOOK	-2,6642	0,0000
GE	-0,1665	0,0000
GMOTORS	-0,4998	0,0000
GOOGLE	-15,2030	0,0000
IBM	-1,8576	0,0000
INTEL	-0,6590	0,0000

J&J	-1,5975	0,0000
JPMORGAN	-1,4125	0,0000
MCDONALD	-2,0048	0,0000
MICROSFT	-1,3489	0,0000
PFIZER	-0,4737	0,0000
P&G	-0,9987	0,0000
STBUCKS	-0,6461	0,0000
WALMART	-1,1176	0,0000
GOLDMAN	-2,9403	0,0000
UPS	-1,4225	0,0000
ALCOA	-0,5116	0,0000
AMERICANEXP	-1,2711	0,0000
BOA	-0,3821	0,0000
CATERPILLAR	-1,7369	0,0000
SNAP	-0,1683	0,0000
DISNEY	-1,4147	0,0000
FORD	-0,1339	0,0000
FEDEX	-2,9824	0,0000
HARLEY-DAVI	-0,5282	0,0000
HP	-0,1963	0,0000
NIKE	-0,9766	0,0000
PEPSI	-1,4727	0,0000
PM	-1,0700	0,0000

TWITTER	-0,5511	0,0000
VISA	-1,7893	0,0000
PAYPAL	-1,1101	0,0000
TESLA	-3,9797	0,0000
NETFLIX	-4,5837	0,0000
BASF	-4,8081	0,0000
DTELEKOM	-0,8014	0,0000
ALLIANZ	-10,5718	0,0000
BAYER	-5,3902	0,0000
BEIERSDO	-5,7928	0,0000
DAIMLERC	-3,3410	0,0000
DBANK	-0,6034	0,0000
SIEMENS	-6,7926	0,0000
LUFTHANS	-1,2224	0,0000
CECONOMY	-0,4067	0,0000
ADIDAS	-11,0385	0,0000
BMW	-4,6292	0,0000
COMMERZBANK	-0,4965	0,0000
CONTINENTAL	-11,2016	0,0000
HENKEL	-6,3539	0,0000
RWE	-1,2993	0,0000
THYSSEN	-1,2999	0,0000
VOLKSWAGEN	-8,2971	0,0000

BARCLAYS	-1,5696	0,0000
GSK	-13,2304	0,0000
M&S	-2,6264	0,0000
RBS	-2,0406	0,0000
ROLLS-ROYCE	-8,3387	0,0000
RIOTINTO	-34,1399	0,0000
SHELL	-22,4957	0,0000
STAN	-5,7047	0,0000
TESCO	-2,1881	0,0000
UNILEVER	-36,7214	0,0000
VODAFONE	-1,5046	0,0000
SANTANDER	-0,2694	0,0000
TELEFONICA	-0,4283	0,0000
BBVA	-0,3475	0,0000
IBERDOLA	-0,3904	0,0000
REPSOL	-0,9774	0,0000
CAIXABANK	-0,2159	0,0000
ABERTIS	-1,0695	0,0000
GASNATURAL	-1,3663	0,0000
REDELECTRIC	-1,0596	0,0000
GRIFOLS	-1,4514	0,0000
BANKINTER	-0,4901	0,0000
MAPFRE	-0,1504	0,0000

ACS	-2,1238	0,0000
AMADEUS	-4,2651	0,0000
INDITEX	-1,6990	0,0000
ACERINOX	-0,6523	0,0000
AENA	-9,1652	0,0000
BANKIA	-0,1809	0,0000
IAG	-0,4421	0,0000
SACYR	-0,1398	0,0000
TECNICAS	-1,4770	0,0000
ASHR.ETF	-0,3316	-0,0313
DBA.ETF	-0,2213	-0,0209
DBC.ETF	-0,2149	-0,0203
EEM.ETF	-0,5579	-0,0526
EFA.ETF	-0,8639	-0,0815
EWA.ETF	-0,2898	-0,0273
EWV.ETF	-0,6405	-0,0604
EWY.ETF	-0,8411	-0,0794
EWZ.ETF	-0,4522	-0,0427
FXI.ETF	-0,5376	-0,0507
GLD.ETF	-1,4793	-0,1396
HYG.ETF	-1,0867	-0,1025
IVV.ETF	-3,5747	-0,3372
IYR.ETF	-1,0183	-0,0961

OIH.ETF	-0,3233	-0,0305
SLV.ETF	-0,1852	-0,0175
SPY.ETF	-3,5504	-0,3349
SSO.ETF	-1,4980	-0,1413
SVXY.ETF	-0,1750	-0,0165
TBT.ETF	-0,4616	-0,0436
VNQ.ETF	-1,0290	-0,0971
VXX.ETF	-0,3970	-0,0374
XHB.ETF	-0,5202	-0,0491
XLB.ETF	-0,7398	-0,0698
XLE.ETF	-0,9502	-0,0896
XLF.ETF	-0,3498	-0,0330
XLI.ETF	-0,9446	-0,0891
XLP.ETF	-0,6705	-0,0633
XLU.ETF	-0,6634	-0,0626
XLV.ETF	-1,1007	-0,1038
XLY.ETF	-1,4234	-0,1343
AUDCAD.	-1,6223	-3,4341
AUDCHF.	3,4373	-7,3343
AUDJPY.	2,6503	-6,7403
AUDNZD.	-3,5329	-2,7183
AUDUSD.	-2,0149	-1,6450
CADCHF.	3,0066	-6,6539



CADJPY.	2,1357	-5,9384
CHFJPY.	-4,4020	-0,7623
CHFPLN.	-3,3266	1,3873
EURAUD.	-14,1800	6,1467
EURCAD.	-12,0089	4,9152
EURCHF.	-1,6928	-3,7888
EURGBP.	-4,2777	0,3182
EURJPY.	-3,7918	-1,9140
EURNOK.	-54,8844	9,8123
EURNZD.	-16,1324	7,2563
EURPLN.	-3,4244	1,2679
EURSEK.	-23,2721	-28,7367
EURTRY.	-353,2517	209,3273
EURUSD.	-10,3677	5,2650
GBPAUD.	-11,2844	2,3762
GBPCAD.	-8,9718	1,1146
GBPCHF.	1,4956	-7,5690
GBPJPY.	-0,4517	-5,8642
GBPNZD.	-13,0715	3,2263
GBPPLN.	-2,5771	0,1861
GBPUSD.	-8,2080	2,5610
NZDUSD.	-1,6263	-1,7967
USDCAD.	-1,3880	-4,4930

USDCHF.	5,2496	-9,7973
USDHKD.	16,3484	-50,3528
USDJPY.	4,2590	-8,9816
USDNOK.	8,1576	-45,5576
USDPLN.	-0,4330	-1,3595
USDSEK.	39,7787	-83,0130
USDTRY.	-269,6647	147,3416
GOLD.	-1,0146	0,6883
SILVER.	-8,0614	5,4662
DE30.	-9,0392	-11,8409
US100.	-10,3267	-1,8968
FR40.	-3,8729	-5,0743
US500.	-3,9411	-0,7239
GB100.	-7,4694	-4,9997
US30.	-3,5225	-0,6470
EU50.	-0,2484	-0,3255
ES35.	-0,6967	-0,9144
IT40.	-1,5632	-2,0481
CH20.	-0,5514	-0,9364
BITCOIN	-150,1417	-65,3416

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