

## Swap Points Table

Valid from 2018.12.10 - 2018.12.16 Swap points are published in the minimum quotation step for the financial instrument.

Instrument	long swap	short swap
EURUSD.pro	-10.8965	5.9396
CADCHF.pro	3.4165	-7.3303
CADJPY.pro	2.3501	-6.5808
CHFJPY.pro	-4.9008	-0.4585
EURCAD.pro	-13.2037	5.5477
EURCHF.pro	-1.4895	-3.8728
EURGBP.pro	-4.6964	0.8937
EURJPY.pro	-4.0333	-1.7312
GBPCAD.pro	-9.1942	1.1582
GBPCHF.pro	2.4396	-8.0475
GBPJPY.pro	0.1727	-6.1778
GBPUSD.pro	-7.9978	2.8460
USDCAD.pro	-1.6275	-4.8463
USDCHF.pro	6.0903	-10.6142
USDJPY.pro	4.8825	-9.7336
AUDCHF.pro	2.9464	-7.0046
AUDCAD.pro	-3.1232	-2.6162
AUDJPY.pro	1.8746	-6.2792
AUDNZD.pro	-3.4033	-3.1420
AUDUSD.pro	-2.9665	-0.8419
CHFPLN.pro	-3.3189	1.3338
EURAUD.pro	-13.6510	5.0264

EURCZK.pro	-2.1395	0.7648
EURHUF.pro	-1.2748	-0.5792
EURNOK.pro	-5.7266	0.8470
EURNZD.pro	-14.3879	5.5860
EURPLN.pro	-3.2473	1.0999
EURSEK.pro	-2.3237	-2.8836
EURTRY.pro	-517.1852	285.6914
GBPAUD.pro	-9.4692	0.3738
GBPNZD.pro	-10.0186	0.7500
GBPPLN.pro	-2.0587	-0.1942
NZDJPY.pro	1.9408	-6.0391
NZDUSD.pro	-2.6985	-0.8422
USDCZK.pro	-0.1825	-0.9824
USDHUF.pro	0.9998	-2.5750
USDNOK.pro	1.3202	-5.4469
USDPLN.pro	-0.0352	-1.7803
USDSEK.pro	4.7292	-9.1331
USDTRY.pro	-413.7382	211.7255
EURZAR.pro	-53.3210	9.0864
USDZAR.pro	-36.1245	-2.4119
SILVER.pro	-1.0540	0.7516
GOLD.pro	-9.0378	6.4418
COPPER.pro	-0.4430	0.3157
EURUSD.std	-12.7971	4.0389
CADCHF.std	2.1779	-8.5691

CADJPY.std	0.9400	-7.9909
CHFJPY.std	-6.7979	-2.3558
EURCAD.std	-15.7349	3.0164
EURCHF.std	-3.3710	-5.7543
EURGBP.std	-6.1822	-0.5921
EURJPY.std	-6.1749	-3.8728
GBPCAD.std	-11.9944	-1.6424
GBPCHF.std	0.3582	-10.1292
GBPJPY.std	-2.1967	-8.5473
GBPUSD.std	-10.1005	0.7430
USDCAD.std	-3.8470	-7.0659
USDCHF.std	4.4406	-12.2640
USDJPY.std	3.0047	-11.6114
AUDCHF.std	1.7559	-8.1952
AUDCAD.std	-4.7248	-4.2179
AUDJPY.std	0.5195	-7.6343
AUDNZD.std	-5.1486	-4.8875
AUDUSD.std	-4.1691	-2.0447
CHFPLN.std	-3.9480	0.7042
EURAUD.std	-16.2847	2.3924
EURCZK.std	-2.5703	0.3339
EURHUF.std	-1.8135	-1.1180
EURNOK.std	-7.3398	-0.7664
EURNZD.std	-17.1461	2.8274
EURPLN.std	-3.9577	0.3893

EURSEK.std	-4.0451	-4.6051
EURTRY.std	-522.2221	280.6519
GBPAUD.std	-12.3830	-2.5403
GBPNZD.std	-13.0700	-2.3020
GBPPLN.std	-2.8446	-0.9804
NZDJPY.std	0.6470	-7.3331
NZDUSD.std	-3.8468	-1.9906
USDCZK.std	-0.5602	-1.3602
USDHUF.std	0.5274	-3.0475
USDNOK.std	-0.0943	-6.8616
USDPLN.std	-0.6582	-2.4034
USDSEK.std	3.2199	-10.6426
USDTRY.std	-418.1526	207.3098
EURZAR.std	-54.6736	7.7335
USDZAR.std	-37.3105	-3.5981
SILVER.std	-1.1752	0.6303
GOLD.std	-10.0767	5.4028
COPPER.std	-0.4939	0.2648
AUDCAD	-4.7248	-4.2179
AUDCHF	1.7559	-8.1952
AUDJPY	0.5195	-7.6343
AUDNZD	-5.1486	-4.8875
AUDUSD	-4.1691	-2.0447
CADCHF	2.1779	-8.5691
CADJPY	0.9400	-7.9909

CHFJPY	-6.7979	-2.3558
CHFPLN	-39.4803	7.0418
EURAUD	-16.2847	2.3924
EURCAD	-15.7349	3.0164
EURCHF	-3.3710	-5.7543
EURCZK	-25.7032	3.3392
EURGBP	-6.1822	-0.5921
EURHUF	-18.1351	-11.1804
EURJPY	-6.1749	-3.8728
EURNOK	-73.3976	-7.6636
EURNZD	-17.1461	2.8274
EURPLN	-39.5772	3.8934
EURSEK	-40.4506	-46.0511
EURTRY	-522.2221	280.6519
EURUSD	-12.7971	4.0389
EURZAR	-546.7365	77.3349
GBPAUD	-12.3830	-2.5403
GBPCAD	-11.9944	-1.6424
GBPCHF	0.3582	-10.1292
GBPJPY	-2.1967	-8.5473
GBPPLN	-28.4464	-9.8041
GBPUSD	-10.1005	0.7430
NZDJPY	0.6470	-7.3331
NZDUSD	-3.8468	-1.9906
USDCAD	-3.8470	-7.0659

USDCHF	4.4406	-12.2640
USDCZK	-5.6023	-13.6022
USDHUF	5.2743	-30.4749
USDJPY	3.0047	-11.6114
USDNOK	-0.9430	-68.6163
USDPLN	-6.5817	-24.0339
USDSEK	32.1991	-106.4264
USDTRY	-418.1526	207.3098
USDZAR	-373.1051	-35.9810
USDMXN	-58.9917	5.8159
XAGUSD	-1.1752	0.6303
XAUUSD	-10.0767	5.4028
COPPER	-0.4939	0.2648
AUDCAD.stp	-3.1232	-2.6162
AUDCHF.stp	2.9464	-7.0046
AUDJPY.stp	1.8746	-6.2792
AUDNZD.stp	-3.4033	-3.1420
AUDUSD.stp	-2.9665	-0.8419
CADCHF.stp	3.4165	-7.3303
CADJPY.stp	2.3501	-6.5808
CHFJPY.stp	-4.9008	-0.4585
CHFPLN.stp	-3.3189	1.3338
EURAUD.stp	-13.6510	5.0264
EURCAD.stp	-13.2037	5.5477
EURCHF.stp	-1.4895	-3.8728

EURGBP.stp	-4.6964	0.8937
EURJPY.stp	-4.0333	-1.7312
EURNOK.stp	-57.2658	8.4704
EURNZD.stp	-14.3879	5.5860
EURPLN.stp	-3.2473	1.0999
EURSEK.stp	-23.2374	-28.8360
EURTRY.stp	-517.1852	285.6914
EURUSD.stp	-10.8965	5.9396
GBPAUD.stp	-9.4692	0.3738
GBPCAD.stp	-9.1942	1.1582
GBPCHF.stp	2.4396	-8.0475
GBPJPY.stp	0.1727	-6.1778
GBPNZD.stp	-10.0186	0.7500
GBPPLN.stp	-2.0587	-0.1942
GBPUSD.stp	-7.9978	2.8460
NZDUSD.stp	-2.6985	-0.8422
USDCAD.stp	-1.6275	-4.8463
USDCHF.stp	6.0903	-10.6142
USDHKD.stp	9.9854	-43.6323
USDJPY.stp	4.8825	-9.7336
USDNOK.stp	13.2016	-54.4691
USDPLN.stp	-0.0352	-1.7803
USDSEK.stp	47.2921	-91.3312
USDTRY.stp	-413.7382	211.7255
XAGUSD.stp	-10.5400	7.5156

XAUUSD.stp	-90.3785	64.4180
3M	-2.6984	-0.0550
AMAZON	-22.1853	-0.4519
AIG	-0.5157	-0.0105
APPLE	-2.2918	-0.0467
AT&T	-0.4103	-0.0084
BABA	-2.0826	-0.0424
BOEING	-4.3982	-0.0896
CHEVRON	-1.5720	-0.0320
CISCO	-0.6317	-0.0129
CITI	-0.7942	-0.0162
COCACOLA	-0.6681	-0.0136
EBAY	-0.3956	-0.0081
EXXONM	-1.0571	-0.0215
FACEBOOK	-1.8705	-0.0381
GE	-0.0956	-0.0019
GMOTORS	-0.4722	-0.0096
GOOGLE	-14.2455	-0.2903
IBM	-1.6245	-0.0331
INTEL	-0.6293	-0.0128
J&J	-1.9789	-0.0403
JPMORGAN	-1.4061	-0.0286
MCDONALD	-2.4904	-0.0507
MICROSFT	-1.4262	-0.0291
PFIZER	-0.5978	-0.0122



P&G	-1.2584	-0.0256
STBUCKS	-0.8910	-0.0182
WALMART	-1.2686	-0.0258
GOLDMAN	-2.4456	-0.0498
UPS	-1.4333	-0.0292
ALCOA	-0.3920	-0.0080
AMERICANEXP	-1.4521	-0.0296
BOA	-0.3461	-0.0071
CATERPILLAR	-1.6814	-0.0343
SNAP	-0.0789	-0.0016
DISNEY	-1.5238	-0.0310
FORD	-0.1199	-0.0024
FEDEX	-2.7402	-0.0558
HARLEY-DAVI	-0.5206	-0.0106
HP	-0.2002	-0.0041
NIKE	-0.9981	-0.0203
PEPSI	-1.5764	-0.0321
PM	-1.1510	-0.0234
TWITTER	-0.4470	-0.0091
VISA	-1.8662	-0.0380
PAYPAL	-1.1262	-0.0230
TESLA	-4.8724	-0.0992
NETFLIX	-3.6072	-0.0735
BASF	-3.3783	-4.7164
DTELEKOM	-0.8717	-1.2169

ALLIANZ	-10.1249	-14.1322
BAYER	-3.6821	-5.1404
BEIERSDO	-5.4161	-7.5621
DAIMLERC	-2.6773	-3.7374
DBANK	-0.4490	-0.6269
SIEMENS	-5.6428	-7.8769
LUFTHANS	-1.1192	-1.5628
CECONOMY	-0.2205	-0.3082
ADIDAS	-11.2590	-15.7173
BMW	-4.1157	-5.7456
COMMERZBANK	-0.3981	-0.5559
CONTINENTAL	-7.1456	-9.9806
HENKEL	-5.7767	-8.0638
RWE	-1.0923	-1.5252
THYSSEN	-0.9102	-1.2724
VOLKSWAGEN	-8.0993	-11.3197
BARCLAYS	-1.3666	-0.7453
GSK	-12.8713	-7.0202
M&S	-2.4727	-1.3489
RBS	-1.8627	-1.0164
ROLLS-ROYCE	-6.9029	-3.7648
RIOTINTO	-31.6064	-17.2340
SHELL	-20.6262	-11.2461
STAN	-5.1936	-2.8321
TESCO	-1.7559	-0.9574

UNILEVER	-37.6662	-20.5373
VODAFONE	-1.4269	-0.7781
SANTANDER	-0.2288	-0.3195
TELEFONICA	-0.4419	-0.6169
BBVA	-0.2684	-0.3747
IBERDOLA	-0.3833	-0.5352
REPSOL	-0.8438	-1.1781
CAIXABANK	-0.1935	-0.2701
REDELECTRIC	-1.1288	-1.5762
GRIFOLS	-1.3833	-1.9322
BANKINTER	-0.4122	-0.5756
MAPFRE	-0.1383	-0.1932
ACS	-1.8367	-2.5649
AMADEUS	-3.5064	-4.8952
INDITEX	-1.5445	-2.1563
ACERINOX	-0.4844	-0.6766
AENA	-8.1254	-11.3521
BANKIA	-0.1573	-0.2198
IAG	-0.3873	-0.5407
SACYR	-0.1015	-0.1419
TECNICAS	-1.3619	-1.9071
BOGDANKA	-0.6102	-0.1275
BUDIMEX	-1.4745	-0.3077
CCC	-2.2288	-0.4635
MBANK	-4.5710	-0.9519

ASSECOPL	-0.5431	-0.1134
SANTANDERPL	-3.8927	-0.8091
EUROCASH	-0.1983	-0.0413
KGHM	-0.9995	-0.2079
LOTOS	-0.9310	-0.1936
MILLENNI	-0.1014	-0.0211
NETIA	-0.0517	-0.0108
ORANGEPL	-0.0552	-0.0115
PEKAO	-1.2250	-0.2547
PGE	-0.1286	-0.0267
PGNIG	-0.0775	-0.0161
PKNORLEN	-1.2273	-0.2551
PKOBP	-0.4537	-0.0943
CDPROJEKT	-1.6379	-0.3407
PZU	-0.4865	-0.1012
CYFRPLST	-0.2504	-0.0521
ALIOR	-0.6057	-0.1262
HANDLOWY	-0.7849	-0.1633
CIECH	-0.5206	-0.1084
INGBSK	-2.0371	-0.4236
JSW	-0.7629	-0.1585
PKPCARGO	-0.4991	-0.1044
TAURON	-0.0264	-0.0055
LPP	-86.2027	-17.9422
ASHR.ETF	-0.3127	-0.0064

DBA.ETF	-0.2368	-0.0048
DBC.ETF	-0.2137	-0.0044
EEM.ETF	-0.5423	-0.0110
EFA.ETF	-0.8273	-0.0169
EWA.ETF	-0.2766	-0.0056
EWV.ETF	-0.5517	-0.0112
EWY.ETF	-0.8024	-0.0163
EWZ.ETF	-0.5266	-0.0107
FXI.ETF	-0.5521	-0.0113
GLD.ETF	-1.6071	-0.0327
HYG.ETF	-1.1275	-0.0230
IVV.ETF	-3.6147	-0.0736
IYR.ETF	-1.1132	-0.0227
OIH.ETF	-0.2299	-0.0047
SLV.ETF	-0.1870	-0.0038
SPY.ETF	-3.5886	-0.0731
SSO.ETF	-1.4035	-0.0286
SVXY.ETF	-0.6246	-0.0127
TBT.ETF	-0.5058	-0.0103
VNQ.ETF	-1.1172	-0.0228
VXX.ETF	-0.5491	-0.0112
XHB.ETF	-0.4661	-0.0095
XLB.ETF	-0.7066	-0.0144
XLE.ETF	-0.8722	-0.0178
XLF.ETF	-0.3419	-0.0070

XLI.ETF	-0.9260	-0.0189
XLP.ETF	-0.7444	-0.0152
XLU.ETF	-0.7680	-0.0156
XLV.ETF	-1.2331	-0.0251
XLY.ETF	-1.4069	-0.0287
BITCOIN	-70.5279	-27.1168
BTCUSD	-245.3904	-202.0638
ETHUSD	-64.2130	-52.8990
LTCUSD	-17.3662	-14.3162
BCHUSD	-7.2482	-5.9817
XRPUSD	-21.1833	-17.4694

The maximum size of the interest rate margin for calculating swap points has been specified in the TMS Fee and Commission Table.

To establish the above-mentioned Swap Points, TMS applied a margin in the amount of:

<b>TMS</b>	
<b>The amount of interest rate commission in order to swap points calculation</b>	
EURTRY, USDTRY, EURZAR, USDZAR, USDMXN, EURTRY.stp, USDTRY.stp, EURTRY.std, USDTRY.std, EURZAR.std, USDZAR.std, EURTRY.pro, USDTRY.pro, EURZAR.pro, USDZAR.pro	4,00%
Stocks and ETF's	2,50%
Other FX (.pro) + FX (.stp), XAGUSD.stp, XAUUSD.stp, COPPER.pro, GOLD.pro, SILVER.pro	0,35%
Other FX + FX(.std) oraz COPPER, XAGUSD, XAUUSD, COPPER.std, GOLD.std, SILVER.std	0,65%
BITCOIN	5,00%
BTCUSD, ETHUSD, LTCUSD, BCHUSD, XRPUSD	23,00%

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:

Currency	Bloomberg ticker	Day counting convention (T)	Deposit rate
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.

$$long\ swap = -spot_{BID} \left( (deposit\ rate + markup) \times \frac{1}{T} \right) \times multiplier$$

$$short\ swap = spot_{ASK} \left( (deposit\ rate - markup) \times \frac{1}{T} \right) \times multiplier$$

*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:*

Currency	Bloomberg ticker	Day counting convention (T)	Deposit rate
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

