

## Swap Points Table

Valid from 2019.03.04 - 2019.03.10. Swap points are published in the minimum quotation step for the financial instrument.

Instrument	long swap	short swap
EURUSD.pro	-11.4297	6.3287
CADCHF.pro	3.5524	-8.0042
CADJPY.pro	2.3349	-6.2814
CHFJPY.pro	-5.9902	-0.2794
EURCAD.pro	-12.6531	5.2376
EURCHF.pro	-1.3239	-5.2959
EURGBP.pro	-4.6570	0.7035
EURJPY.pro	-3.9447	-1.9020
GBPCAD.pro	-9.0580	0.8095
GBPCHF.pro	2.7380	-10.1568
GBPJPY.pro	0.1856	-6.6686
GBPUSD.pro	-9.0457	3.3979
USDCAD.pro	-0.5175	-5.5815
USDCHF.pro	6.8405	-12.3472
USDJPY.pro	5.4684	-10.2539
AUDCHF.pro	3.0127	-7.5042
AUDCAD.pro	-2.8006	-2.3037
AUDJPY.pro	1.8264	-5.8755
AUDNZD.pro	-3.0934	-2.8337
AUDUSD.pro	-3.3048	-0.2361
CHFPLN.pro	-3.7167	1.3866
EURAUD.pro	-13.3375	4.8018

EURCZK.pro	-2.0785	0.9113
EURHUF.pro	-1.1588	-0.3951
EURNOK.pro	-5.4775	0.5424
EURNZD.pro	-13.9754	5.3226
EURPLN.pro	-3.2519	1.0357
EURSEK.pro	-3.1334	-2.9287
EURTRY.pro	-523.0444	338.7284
GBPAUD.pro	-9.5077	-0.0220
GBPNZD.pro	-10.0039	0.3547
GBPPLN.pro	-2.1686	-0.3021
NZDJPY.pro	1.9025	-5.6871
NZDUSD.pro	-3.0424	-0.2646
USDCZK.pro	-0.0251	-0.9296
USDHUF.pro	1.2080	-2.4866
USDNOK.pro	2.0571	-6.1246
USDPLN.pro	0.1648	-1.9941
USDSEK.pro	4.6756	-9.7146
USDTRY.pro	-418.0439	257.2999
EURZAR.pro	-55.2636	9.8724
USDZAR.pro	-37.3559	-2.2167
SILVER.pro	-1.1810	0.8666
GOLD.pro	-10.0434	7.3642
COPPER.pro	-0.4978	0.3650
EURUSD.std	-13.3190	4.4395
CADCHF.std	2.2986	-9.2581

CADJPY.std	0.9340	-7.6823
CHFJPY.std	-7.8525	-2.1417
EURCAD.std	-15.1671	2.7235
EURCHF.std	-3.2153	-7.1873
EURGBP.std	-6.0770	-0.7166
EURJPY.std	-6.0579	-4.0153
GBPCAD.std	-11.9682	-2.1008
GBPCHF.std	0.5486	-12.3461
GBPJPY.std	-2.2607	-9.1151
GBPUSD.std	-11.2327	1.2107
USDCAD.std	-2.7352	-7.7993
USDCHF.std	5.1721	-14.0156
USDJPY.std	3.6042	-12.1182
AUDCHF.std	1.8313	-8.6859
AUDCAD.std	-4.3711	-3.8745
AUDJPY.std	0.5061	-7.1958
AUDNZD.std	-4.8280	-4.5685
AUDUSD.std	-4.4852	-1.4163
CHFPLN.std	-4.3435	0.7593
EURAUD.std	-16.0051	2.1341
EURCZK.std	-2.5056	0.4841
EURHUF.std	-1.6855	-0.9220
EURNOK.std	-7.1046	-1.0848
EURNZD.std	-16.7521	2.5456
EURPLN.std	-3.9635	0.3241

EURSEK.std	-4.8905	-4.6860
EURTRY.std	-528.1401	333.6319
GBPAUD.std	-12.5957	-3.1103
GBPNZD.std	-13.2180	-2.8600
GBPPLN.std	-2.9922	-1.1262
NZDJPY.std	0.6342	-6.9556
NZDUSD.std	-4.1762	-1.3985
USDCZK.std	-0.4018	-1.3064
USDHUF.std	0.7434	-2.9513
USDNOK.std	0.6219	-7.5600
USDPLN.std	-0.4629	-2.6218
USDSEK.std	3.1257	-11.2647
USDTRY.std	-422.5360	252.8074
EURZAR.std	-56.6098	8.5261
USDZAR.std	-38.5434	-3.4042
SILVER.std	-1.3071	0.7404
GOLD.std	-11.1157	6.2918
COPPER.std	-0.5510	0.3119
AUDCAD	-4.3711	-3.8745
AUDCHF	1.8313	-8.6859
AUDJPY	0.5061	-7.1958
AUDNZD	-4.8280	-4.5685
AUDUSD	-4.4852	-1.4163
CADCHF	2.2986	-9.2581
CADJPY	0.9340	-7.6823

CHFJPY	-7.8525	-2.1417
CHFPLN	-43.4350	7.5934
EURAUD	-16.0051	2.1341
EURCAD	-15.1671	2.7235
EURCHF	-3.2153	-7.1873
EURCZK	-25.0563	4.8414
EURGBP	-6.0770	-0.7166
EURHUF	-16.8555	-9.2201
EURJPY	-6.0579	-4.0153
EURNOK	-71.0457	-10.8479
EURNZD	-16.7521	2.5456
EURPLN	-39.6346	3.2408
EURSEK	-48.9047	-46.8595
EURTRY	-528.1401	333.6319
EURUSD	-13.3190	4.4395
EURZAR	-566.0982	85.2606
GBPAUD	-12.5957	-3.1103
GBPCAD	-11.9682	-2.1008
GBPCHF	0.5486	-12.3461
GBPJPY	-2.2607	-9.1151
GBPPLN	-29.9215	-11.2616
GBPUSD	-11.2327	1.2107
NZDJPY	0.6342	-6.9556
NZDUSD	-4.1762	-1.3985
USDCAD	-2.7352	-7.7993

USDCHE	5.1721	-14.0156
USDCZK	-4.0184	-13.0642
USDHUF	7.4340	-29.5133
USDJPY	3.6042	-12.1182
USDNOK	6.2192	-75.6000
USDPLN	-4.6285	-26.2182
USDSEK	31.2571	-112.6466
USDTRY	-422.5360	252.8074
USDZAR	-385.4335	-34.0416
USDMXN	-55.2310	4.2663
XAGUSD	-1.3071	0.7404
XAUUSD	-11.1157	6.2918
COPPER	-0.5510	0.3119
AUDCAD.stp	-2.8006	-2.3037
AUDCHF.stp	3.0127	-7.5042
AUDJPY.stp	1.8264	-5.8755
AUDNZD.stp	-3.0934	-2.8337
AUDUSD.stp	-3.3048	-0.2361
CADCHF.stp	3.5524	-8.0042
CADJPY.stp	2.3349	-6.2814
CHFJPY.stp	-5.9902	-0.2794
CHFPLN.stp	-3.7167	1.3866
EURAUD.stp	-13.3375	4.8018
EURCAD.stp	-12.6531	5.2376
EURCHF.stp	-1.3239	-5.2959

EURGBP.stp	-4.6570	0.7035
EURJPY.stp	-3.9447	-1.9020
EURNOK.stp	-54.7752	5.4240
EURNZD.stp	-13.9754	5.3226
EURPLN.stp	-3.2519	1.0357
EURSEK.stp	-31.3339	-29.2875
EURTRY.stp	-523.0444	338.7284
EURUSD.stp	-11.4297	6.3287
GBPAUD.stp	-9.5077	-0.0220
GBPCAD.stp	-9.0580	0.8095
GBPCHF.stp	2.7380	-10.1568
GBPJPY.stp	0.1856	-6.6686
GBPNZD.stp	-10.0039	0.3547
GBPPLN.stp	-2.1686	-0.3021
GBPUSD.stp	-9.0457	3.3979
NZDUSD.stp	-3.0424	-0.2646
USDCAD.stp	-0.5175	-5.5815
USDCHF.stp	6.8405	-12.3472
USDHKD.stp	17.6599	-51.4532
USDJPY.stp	5.4684	-10.2539
USDNOK.stp	20.5710	-61.2461
USDPLN.stp	0.1648	-1.9941
USDSEK.stp	46.7562	-97.1456
USDTRY.stp	-418.0439	257.2999
XAGUSD.stp	-11.8102	8.6656

XAUUSD.stp	-100.4341	73.6421
3M	-2.8718	-0.0104
AMAZON	-23.1278	-0.0841
AIG	-0.5982	-0.0022
APPLE	-2.4212	-0.0088
AT&T	-0.4265	-0.0016
BABA	-2.5445	-0.0093
BOEING	-6.1014	-0.0222
CHEVRON	-1.6883	-0.0061
CISCO	-0.7113	-0.0026
CITI	-0.8923	-0.0032
COCACOLA	-0.6277	-0.0023
EBAY	-0.5167	-0.0019
EXXONM	-1.1069	-0.0040
FACEBOOK	-2.2456	-0.0082
GE	-0.1421	-0.0005
GMOTORS	-0.5469	-0.0020
GOOGLE	-15.8937	-0.0578
IBM	-1.9265	-0.0070
INTEL	-0.7376	-0.0027
J&J	-1.9148	-0.0070
JPMORGAN	-1.4449	-0.0053
MCDONALD	-2.5601	-0.0093
MICROSFT	-1.5570	-0.0057
PFIZER	-0.6000	-0.0022

P&G	-1.3623	-0.0050
STBUCKS	-0.9803	-0.0036
WALMART	-1.3553	-0.0049
GOLDMAN	-2.7429	-0.0100
UPS	-1.5517	-0.0056
ALCOA	-0.4105	-0.0015
AMERICANEXP	-1.5072	-0.0055
BOA	-0.4056	-0.0015
CATERPILLAR	-1.9027	-0.0069
SNAP	-0.1358	-0.0005
DISNEY	-1.5779	-0.0057
FORD	-0.1216	-0.0004
FEDEX	-2.5297	-0.0092
HARLEY-DAVI	-0.5242	-0.0019
HP	-0.2265	-0.0008
NIKE	-1.2063	-0.0044
PEPSI	-1.6075	-0.0058
PM	-1.2109	-0.0044
TWITTER	-0.4237	-0.0015
VISA	-2.0693	-0.0075
PAYPAL	-1.3671	-0.0050
TESLA	-4.0768	-0.0148
NETFLIX	-4.9426	-0.0180
BASF	-3.9684	-5.5352
DTELEKOM	-0.8468	-1.1814

ALLIANZ	-11.4875	-16.0241
BAYER	-4.2044	-5.8644
BEIERSDO	-4.7954	-6.6911
DAIMLERC	-3.1065	-4.3373
DBANK	-0.4766	-0.6651
SIEMENS	-5.6480	-7.8778
LUFTHANS	-1.3172	-1.8378
CECONOMY	-0.2927	-0.4085
ADIDAS	-12.5686	-17.5367
BMW	-4.3384	-6.0513
COMMERZBANK	-0.4225	-0.5898
CONTINENTAL	-8.5028	-11.8624
HENKEL	-5.1597	-7.1991
RWE	-1.2464	-1.7399
THYSSEN	-0.7679	-1.0714
VOLKSWAGEN	-9.1582	-12.7804
BARCLAYS	-1.4566	-0.8000
GSK	-13.3898	-7.3546
M&S	-2.4618	-1.3528
RBS	-2.3442	-1.2882
ROLLS-ROYCE	-7.7711	-4.2702
RIOTINTO	-38.9349	-21.3826
SHELL	-20.8204	-11.4379
STAN	-5.4649	-3.0028
TESCO	-2.0259	-1.1130

UNILEVER	-35.2652	-19.3674
VODAFONE	-1.1740	-0.6449
SANTANDER	-0.2464	-0.3436
TELEFONICA	-0.4307	-0.6008
BBVA	-0.3108	-0.4336
IBERDOLA	-0.4224	-0.5892
REPSOL	-0.8726	-1.2178
CAIXABANK	-0.1799	-0.2510
REDELECTRIC	-1.0884	-1.5183
GRIFOLS	-1.4024	-1.9575
BANKINTER	-0.4135	-0.5769
MAPFRE	-0.1450	-0.2024
ACS	-2.3171	-3.2331
AMADEUS	-3.8303	-5.3451
INDITEX	-1.5561	-2.1711
ACERINOX	-0.5516	-0.7710
AENA	-9.1118	-12.7157
BANKIA	-0.1554	-0.2169
IAG	-0.3950	-0.5512
SACYR	-0.1284	-0.1801
TECNICAS	-1.4686	-2.0538
BOGDANKA	-58.0734	-12.1814
BUDIMEX	-133.6142	-27.9441
CCC	-215.2800	-44.7907
MBANK	-484.3233	-100.7025

ASSECOPL	-61.6463	-12.8411
SANTANDERPL	-429.1989	-89.2515
EUROCASH	-23.4789	-4.8843
KGHM	-113.9918	-23.7030
LOTOS	-107.1863	-22.2752
MILLENNI	-10.1969	-2.1205
NETIA	-5.5578	-1.1757
ORANGEPL	-6.1193	-1.2723
PEKAO	-128.5101	-26.7071
PGE	-12.3293	-2.5623
PGNIG	-7.4690	-1.5527
PKNORLEN	-113.5381	-23.5970
PKOBP	-43.8386	-9.1113
CDPROJEKT	-218.2290	-45.3562
PZU	-47.5590	-9.8818
CYFRPLST	-28.2654	-5.8763
ALIOR	-71.0605	-14.7967
HANDLOWY	-75.5408	-15.7392
CIECH	-69.0189	-14.3726
INGBSK	-218.4559	-45.4268
JSW	-65.3780	-13.5904
PKPCARGO	-47.1847	-9.8488
TAURON	-2.5747	-0.5353
LPP	-9056.9589	-1883.7534
ASHR.ETF	-0.3900	-0.0014

DBA.ETF	-0.2278	-0.0008
DBC.ETF	-0.2184	-0.0008
EEM.ETF	-0.5879	-0.0021
EFA.ETF	-0.8944	-0.0033
EWA.ETF	-0.2964	-0.0011
EWV.ETF	-0.5988	-0.0022
EWY.ETF	-0.8722	-0.0032
EWZ.ETF	-0.5861	-0.0021
FXI.ETF	-0.6114	-0.0022
GLD.ETF	-1.6866	-0.0061
HYG.ETF	-1.1846	-0.0043
IVV.ETF	-3.9055	-0.0142
IYR.ETF	-1.1620	-0.0042
OIH.ETF	-0.2411	-0.0009
SLV.ETF	-0.1965	-0.0007
SPY.ETF	-3.8814	-0.0141
SSO.ETF	-1.6003	-0.0058
SVXY.ETF	-0.7222	-0.0026
TBT.ETF	-0.5068	-0.0018
VNQ.ETF	-1.1587	-0.0042
XHB.ETF	-0.5344	-0.0019
XLB.ETF	-0.7608	-0.0028
XLE.ETF	-0.9194	-0.0033
XLF.ETF	-0.3692	-0.0013
XLI.ETF	-1.0574	-0.0038

XLP.ETF	-0.7500	-0.0027
XLU.ETF	-0.7903	-0.0029
XLV.ETF	-1.2863	-0.0047
XLY.ETF	-1.5375	-0.0056
BITCOIN	-76.5500	-26.5850
BTCUSD	-261.2550	-211.3455
ETHUSD	-87.6708	-70.9812
LTCUSD	-32.0230	-25.9434
BCHUSD	-8.7038	-7.0675
XRPUSD	-21.3015	-17.2441

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:*

<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.

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

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

*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