

# Market Quality Program

Version: April 2024. Effective as of 9 April 2024.

## 1. Introduction

The objective of the Market Quality Program (the "MQP", as defined below) is to improve visible liquidity on Thalex.

Orderbook contributions by Participants is measured directly in frequent snapshots.

Rewards are distributed out of a stablecoin reward pool, independent of traded volume.

Rewards per snapshot vary by instrument and depend on the level of liquidity as measured by our market quality scoring methodology. For each orderbook snapshot, a participant's share of the reward is calculated as their percentage of market quality score.

Participation in the program is fully open, and it does not require prior enrollment. Anyone adding liquidity is participating, provided they comply with the only requirement to maintain a margin balance of at least \$5,000.

## 2. Rewards

The Reward Pool is capped at \$200K / month, allocated as follows:

Segments	BTC	ETH
Perpetual	\$40,000	\$40,000
Future Rolls	\$10,000	\$10,000
Options	\$50,000	\$50,000

Aggregation is as follows:

- Each month has ~260K snapshots. Each snapshot has an equal weight of the Reward Pool
- Per snapshot, for each eligible instrument, market quality is scored per orderbook. Bids and asks are equally weighted.
- Future Rolls and Options have N different eligible instruments at any given time. The rewards per instrument are 1/N of the product group.

The total reward paid per orderbook snapshot is a function of the level of liquidity (see section 3.1 ).

- Below a minimum threshold of market quality, the orderbook snapshot is not rewarded, i.e. no participant receives a score regardless of having a limit order in the book.
- Above the threshold, the total reward scales proportionately to the total level of market quality
- If an orderbook snapshot meets the target level of market quality is, or surpasses it, the reward is equal to  $\$200K / N_{\text{snapshots}} \times \text{Allocation}_{\text{instrument}}$

### 3. Market Quality Scoring

#### 3.1. Overview

The objective of market quality scoring is to compare the relative liquidity contribution of each order in a given order book, and reward this contribution accordingly.

Price levels are discounted in function of distance to the Mid Price ("Distance Discounting", see 3.2). Price scores then get multiplied with order size to yield a metric called Top of Book Equivalent Score ("TOBE" in short, see 0).

Dividing the TOBE of an order by the sum total TOBE of all orders in an order book gives a % score called Market Quality Score ("MQS" in short, see 3.3).

A participant's share of the orderbook snapshot reward is the MQS of ones orders.

The TOBE of an orderbook is a proxy for the quality of visible liquidity of a snapshot and is compared to target values to determine the snapshot reward (see 3.4).

Daily email reports on a participant's performance will be available on an opt-in basis.

#### 3.2. Distance Discounting

Price levels are expressed in terms of the the absolute difference with the Mid Price. Mid Price is the average of the best bid and ask.

Price Distance is normalized by an instrument-specific Typical Distance ("Normalized Distance", "ND"). Typical Distance is expressed in the form of bps x Index, which varies by product group (see 4.1).

$$P_{\text{mid}} = \frac{\text{Bid}_{\text{best}} + \text{Ask}_{\text{best}}}{2}$$

$$\text{Price Distance} = |P_{\text{mid}} - P_{\text{order}}|$$

$$\text{Normalized Distance} = \frac{\text{Price Distance}}{\text{Typical Distance}}$$

Price scoring uses Normalized Distance as the input to a non-linear discounting function.

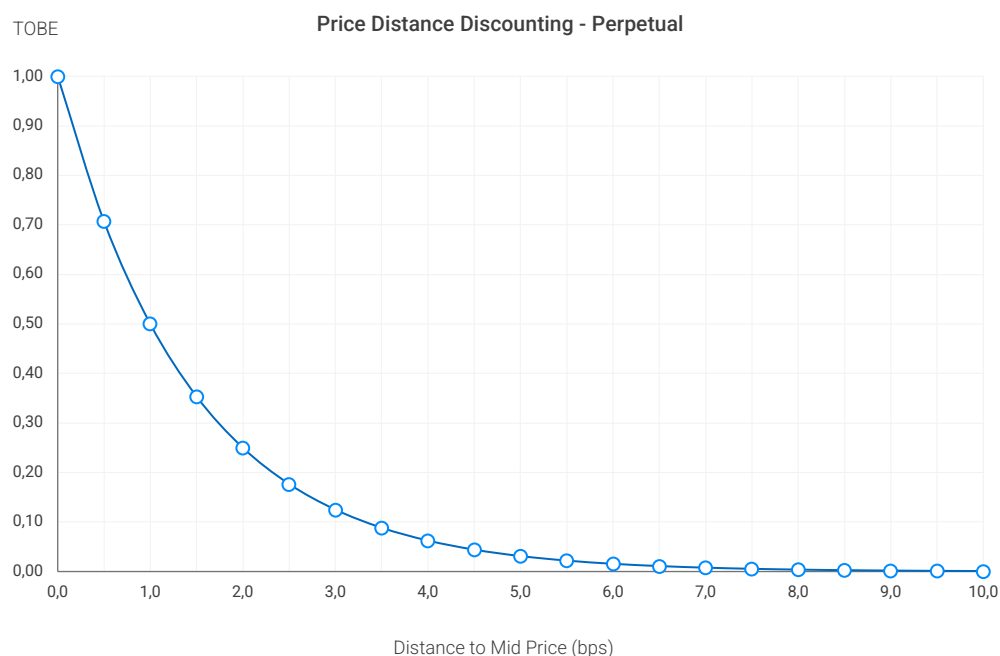
Perpetuals use:

$$\text{Price Score} = 0.5^{\text{ND}}$$

Future rolls and options use:

$$\text{Price Score} = 0.1^{\text{ND}}$$

Below we illustrate price discounting for the perpetual. Typical distance for perpetuals is 1 bps x Index, hence 1 bps distance from  $P_{\text{mid}}$  is a 50% discount, 2 bps distance means 25%.



### 3.3. Top of Book Equivalent and Market Quality Scores

The TOBE score of an order equals Price Score ('PS') x Size ('Q'). Orders with the same price will therefore have TOBE scores proportional to size.

$$TOBE_{order} = PS \times Q_{order}$$

The Market Quality Score ('MQS') for each order is its TOBE score relative to the sum of TOBE scores in the orderbook:

$$MQS_{order} = \frac{TOBE_{order}}{\sum TOBE}$$

A participant's MQS for an orderbook snapshot is the sum total MQS of her orders.

$$MQS_{participant} = \sum MQS_{orders}$$

MQS equals the share of rewards received for the orderbook snapshot.

The calculation is illustrated here with a BTC Perpetual example:

- Assume the index price is \$30K, hence Typical Distance is \$3
- 'PD' is short for Price Distance, 'ND' for Normalized Distance, 'PS' for Price Score

Ask	Price (USD)	Size (BTC)	PD (USD)	ND (BPS)	PS (Score)	TOBE (Score)	MQS (%)
E	30010	18	10	3.3	0.10	1.79	8.2%
D	30008	25	8	2.7	0.16	3.94	18.2%
C	30006	8	6	2.0	0.25	2.00	9.2%
B	30004	4	4	1.3	0.40	1.59	7.3%
A	30002	2	2	0.7	0.63	1.26	5.8%
Mid Price	30000					TOBE <sub>sum</sub>	21.69

Bid	Price (USD)	Size (BTC)	PD (USD)	ND (BPS)	PS (Score)	TOBE (Score)	MQS (%)
A	29998	4	2	0.7	0.63	2.52	11.6%
B	29996	4	4	1.3	0.40	1.59	7.3%
C	29994	6	6	2.0	0.25	1.50	6.9%
D	29992	35	8	2.7	0.16	5.51	25.4%

### 3.4. Orderbook Snapshot Reward

The Maximum Snapshot Reward ('MSR') is determined by the monthly Reward Pool for the product ('MRP'), the number of snapshots in a month (N) and the allocation for the instrument ('W'):

$$MSR_{\max} = \frac{RP}{N_{\text{snapshots}}} \times W$$

The Snapshot Reward for an orderbook is calculated as a percentage ('MSR%') of the maximum reward:

$$SR_{\text{orderbook}} = MSR_{\max} \times MSR\%$$

The Market Quality Reward ('MQR') for each order is the Market Quality Score of the order multiplied by the orderbook Snapshot Reward.

$$MQR_{\text{order}} = MQS_{\text{order}} \times SR_{\text{orderbook}}$$

The MSR% for each orderbook snapshot is a function of liquidity as measured by the aggregate TOBE. Below a minimum TOBE threshold, the orderbook snapshot reward is zero. At or above a target TOBE level, the MSR% is 100%. Between minimum and target TOBE, the MSR% is linearly interpolated.

TOBE values per product group are shown below.

<b>BTC</b>	<b>Futures</b> (Score)	<b>Options</b> (Score)	<b>Rolls</b> (Score)	<b>MSR</b> (%)
TOBE <sub>min</sub>	0.5	0.5	0.5	0%
TOBE <sub>max</sub>	3.0	3.0	3.0	100%

<b>ETH</b>	<b>Futures</b> (Score)	<b>Options</b> (Score)	<b>Rolls</b> (Score)	<b>MSR</b> (%)
TOBE <sub>min</sub>	5.0	5.0	5.0	0%
TOBE <sub>max</sub>	30.0	30.0	30.0	100%

Altogether:

$$MSR\% = \begin{cases} 0\% & \text{if } TOBE_{sum} < TOBE_{min} \\ \left( \frac{TOBE_{sum} - TOBE_{min}}{TOBE_{max} - TOBE_{min}} \right) & \text{if } TOBE_{min} \leq TOBE_{sum} \leq TOBE_{max} \\ 100\% & \text{if } TOBE_{sum} > TOBE_{max} \end{cases}$$

## 4. Appendix

### 4.1. Product-specific Parameters

"TTE": Time to expiry

"PD": Price Distance

Perpetual		
Price discounting	BTC & ETH	Price Score = $0.5^{ND}$ $ND = \frac{ P_{mid} - P_{order} }{1 \text{ bps} \times \text{Index}}$
Eligible Instruments	BTC & ETH	All Perpetuals
Future Rolls		
Price discounting	BTC & ETH	Price Score = $0.1^{ND}$ $ND = \frac{ P_{mid} - P_{order} }{2 \text{ bps} \times \text{Index}}$
Eligible Instruments	BTC & ETH	Future Rolls with a Perpetual leg <u>and</u> TTE < 5 weeks
Options		
Price discounting	BTC & ETH	Price Score = $0.1^{ND}$ $ND = \frac{ P_{mid} - P_{order} }{20 \text{ bps} \times \text{Index}}$
Eligible Instruments	BTC & ETH	Delta 5 up to and including the first ITM strike <u>and</u> TTE < 5 weeks

# Terms and Conditions: Market Quality Program

Version: April 2024. Effective as of 9 April 2024.

These Terms and Conditions (the “**MQP Terms**”) apply to the market quality program (the “**MQP**”) offered by Thalex Digital Trading Platform Ltd, an International Business Company incorporated in the Republic of Seychelles, registered under company number 231189 and with its registered office at Suite 202, 2nd floor, Eden Plaza, Eden Island, PO Box 1352, Mahe, Republic of Seychelles (“**Thalex**”, “**we**”, “**us**” or “**our**”). Your participation in the MQP is governed by these MQP Terms. If you have any questions, please contact us by sending an email to support@thalex.com.

If you do not accept the terms of these MQP Terms, or any amendment to them, you will not be eligible to participate in the MQP and receive any rewards granted under it. Any amendments to these MQP Terms and/or the MQP will be published on thalex.com and, to the extent possible, notified to you via e-mail or other notification channels.

## 1. Introduction

- 1.1. Any capitalized terms not defined herein shall have the meaning given to them in the [Rulebook](#) and/or the [Terms of Use](#).
- 1.2. These MQP Terms should be read in conjunction with, and form part of, the Market Quality Program document, which sets out, among other things, the reward pool, reward size and market quality scoring.
- 1.3. In addition to these MQP Terms, you agree and acknowledge to be bound by and comply with the provisions laid down in the [Terms of Use](#) and [Rulebook](#) when using, and trading on, the Platform as well as when participating in the MQP. For the avoidance of doubt, should a conflict arise between these MQP Terms on the one hand and the [Rulebook](#) and/or the [Terms of Use](#) on the other hand, the provisions of the [Rulebook](#) respectively the [Terms of Use](#) shall prevail.

## 2. The Market Quality Program (MQP)

- 2.1. The MQP rewards anyone who makes a meaningful contribution to market quality of the Platform in Admitted Contracts relevant to the MQP. The objective of the MQP is to maximize visible liquidity on the Platform.
- 2.2. Performance will be measured for each snapshot and reported daily on an opt-in basis.
- 2.3. The MQP shall automatically terminate in any event by 30 June 2024, unless terminated earlier in accordance with Clause 2.7.
- 2.4. Every customer is eligible except if: (a) the customer, or (b) its ultimate beneficial owners, own directly or indirectly, an equity interest in the Thalex Group or beneficiaries that is greater than or equal to 10%.
- 2.5. To be eligible to receive TOBE scores and to receive payment for a snapshot reward, each account, or sub-account, individually, must have a margin balance greater than or equal to \$5,000.
- 2.6. You agree and acknowledge that our calculations and decisions associated with the MQP, such as (but not limited to) the assessment of market quality scoring and the calculation of rewards, are binding and final (except in the case of an obvious and manifest error) and that we may change the methodologies of such calculations at any time in so far as such change is not applied retroactively.

- 2.7. We may, in our sole discretion and at any point in time, terminate the MQP to ensure a fair and orderly market on the Platform, uphold the financial stability of the Platform, comply with Applicable Law or a request of a Regulatory Authority and/or for any other reason that we reasonably deem necessary.
- 2.8. We reserve the right to, in our sole discretion and at any time:
- a. change the scope, size and/or eligibility criteria of the MQP;
  - b. adjust future budget allocations used in the MQP;
  - c. adjust any (variables, elements or other factors forming part of) calculations used to determine (the size of or eligibility to) rewards in the MQP;
  - d. restrict or remove functionalities and/or use of the MQP; and/or
  - e. make any other changes or improvements to the MQP,
- without becoming liable to you and/or any other party, provided that (i) granted but not yet paid rewards shall be paid out by us notwithstanding the applicability of this Clause 2.8, and (ii) any change shall not apply retroactively unless otherwise required by Applicable Law or Regulatory Authority.
- 2.9. The continued participation in the MQP, after any amendment to these MQP Terms, constitutes your acceptance of these MQP Terms, as modified by such amendment.
- 2.10. The applicable methodology and terms of the MQP will be available on [thalex.com](https://thalex.com).

### **3. Payment Terms**

- 3.1. All rewards granted under the MQP on a continuous (per snapshot) basis and paid in USDT (or any other stablecoin as determined by Thalex in its sole discretion from time to time) on a Monthly basis.
- 3.2. We strive to make the reward payment(s) within 4 weeks following the end of the relevant month or date of termination of the MQP by crediting the applicable sum in stablecoin to your Account.
- 3.3. We are under no obligation whatsoever to pay any reward(s) to anyone who does not strictly follow these MQP Terms, the [Rulebook](#) and/or the [Terms of Use](#), as amended, where applicable.
- 3.4. Reward payments do not include any Taxes. You are responsible for declaring and paying all Taxes associated with any activity you carry out through your Account, including your participation in and any rewards received under the MQP.

### **4. Miscellaneous**

- 4.1. Severability - If any provision or part-provision of these MQP Terms is or becomes invalid, illegal or unenforceable, in whole or in part, it shall be deemed modified to the minimum extent necessary to make it valid, legal and enforceable and to give effect to the commercial intention of the Parties. If such modification is not possible, the relevant provision or part-provision shall be deemed deleted. Any modification to or deletion of a provision or part-provision under this Term 4.1 shall not affect the validity and enforceability of the rest of these MQP Terms. If any provision or part-provision of these MQP Terms is invalid, illegal or unenforceable, the Parties shall negotiate in good faith to amend such provision so that, as amended, it is legal, valid and enforceable, and, to the greatest extent possible, achieves the intended commercial result of the original provision.
- 4.2. Force Majeure - We shall not be required to perform any of our obligations under these MQP Terms, or any other agreement with you, or to compensate you for Losses caused by any delay or failure of performance, to the extent such delay or failure of performance is the result of a Force Majeure.



- 4.3. Governing Law - These MQP Terms and any non-contractual obligations arising out of, or in connection with them, are governed by, and are to be interpreted in accordance with, the laws of Gibraltar.
- 4.4. Jurisdiction - The courts of Gibraltar shall have exclusive jurisdiction to settle any dispute which may arise out of or in connection with these MQP Terms (including any non-contractual obligations arising out of or in connection with these MQP Terms). Nothing in this Term 4.4 will prevent us from bringing proceedings against you in any other jurisdiction.