



TLREF

Turkish Lira
Overnight Reference Rate

Levent Bilgin
27.02.2020, İstanbul

Purpose

- **To meet the need of Turkish Lira overnight reference rate**
- **Underlying interest is to measure the rate in a market where credit, liquidity and other risks are minimal**
- **The starting date of TLREF rate**
 - **Calculation December 28, 2018**
 - **Dissemination June 17, 2019**

Scope

Overnight Repo Transactions

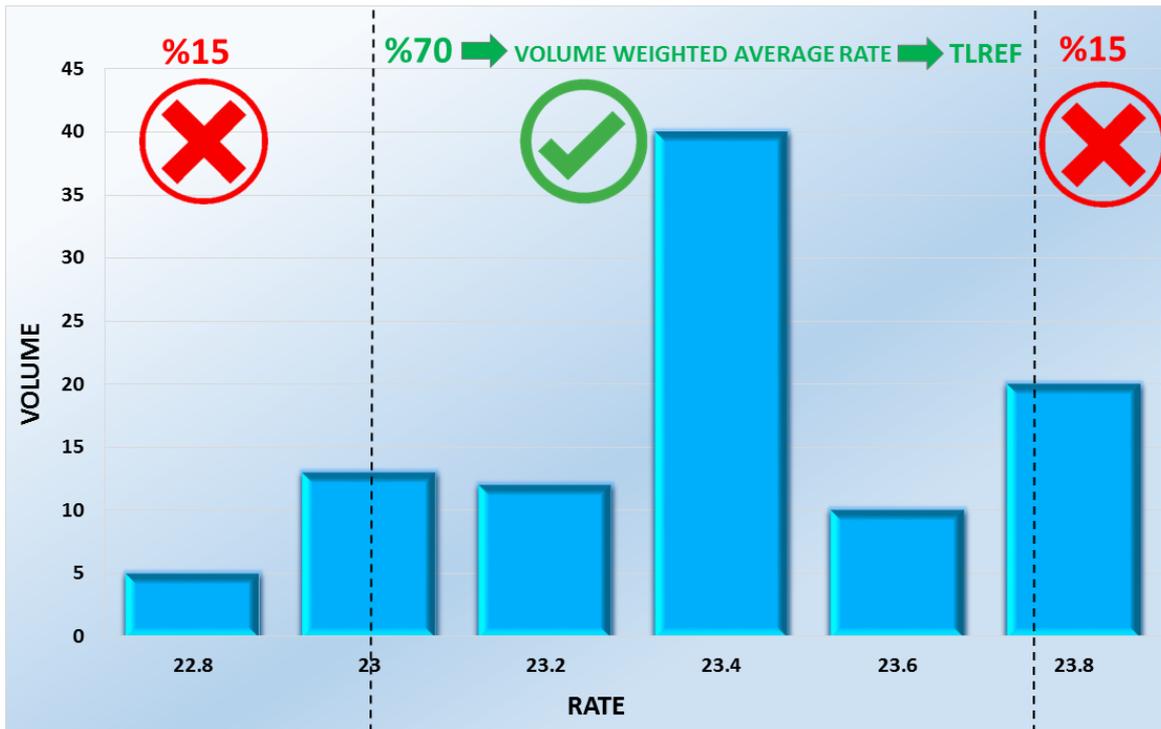
- + Secured by TL denominated government debt securities
- + Realised on Borsa Istanbul Repo-reverse Repo Market
- + With the starting value date of the same day

Transactions that are not included

- Cross trades
- Non cleared transactions
- Cancelled transactions
- Trade Report transactions

TLREF Calculation Method

Volume weighted trimmed mean of the transactions



1

Eligible transactions are ranked by interest rates

2

Outliers (Top and bottom 15% of the traded volumes) are removed

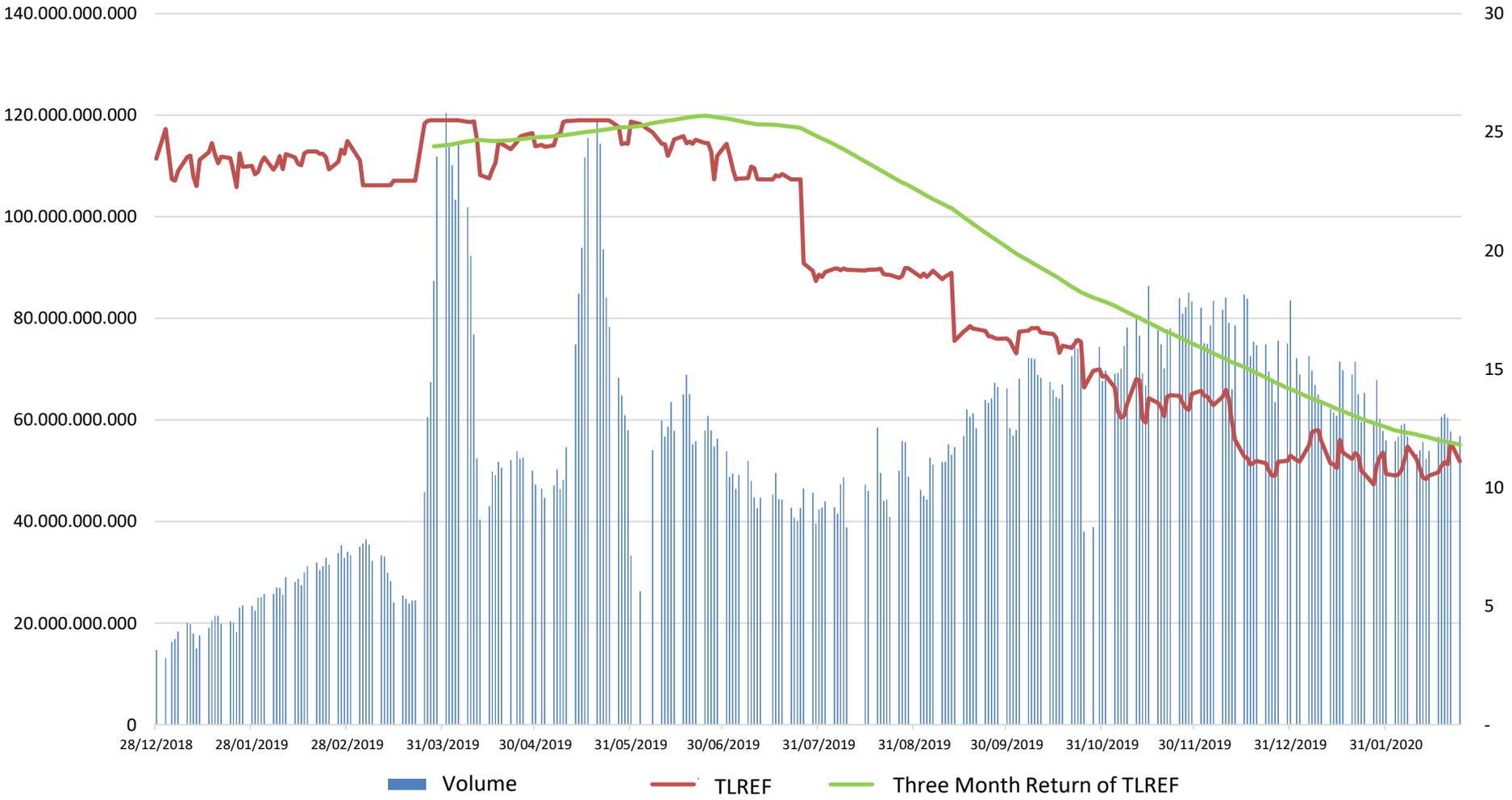
3

Volume weighted mean of the remaining transactions

$$TLREF = \sum_{i=1}^n (R_i * V_i) / V$$

Only the part of trading volume, which falls in central 70% of the transactions at the lower and upper bounds are included

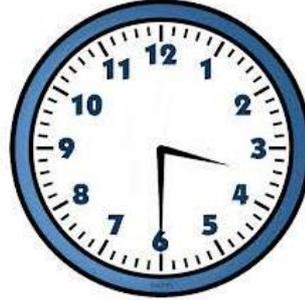
TLREF Rates and Volumes



Calculation and Dissemination Times

Calculation

- 15:30 for trading days
- 11:30 for half days



Dissemination Through BISTECH Data Dissemination System

- 15:50 for trading days
- 12:35 for half days

Reports on Data Store and Web Page

- 16:00 for trading days
- 12:45 for half days

BIST TLREF Index

Tracks the return of TLREF rate

Shows the return that will be realized on the next trading day

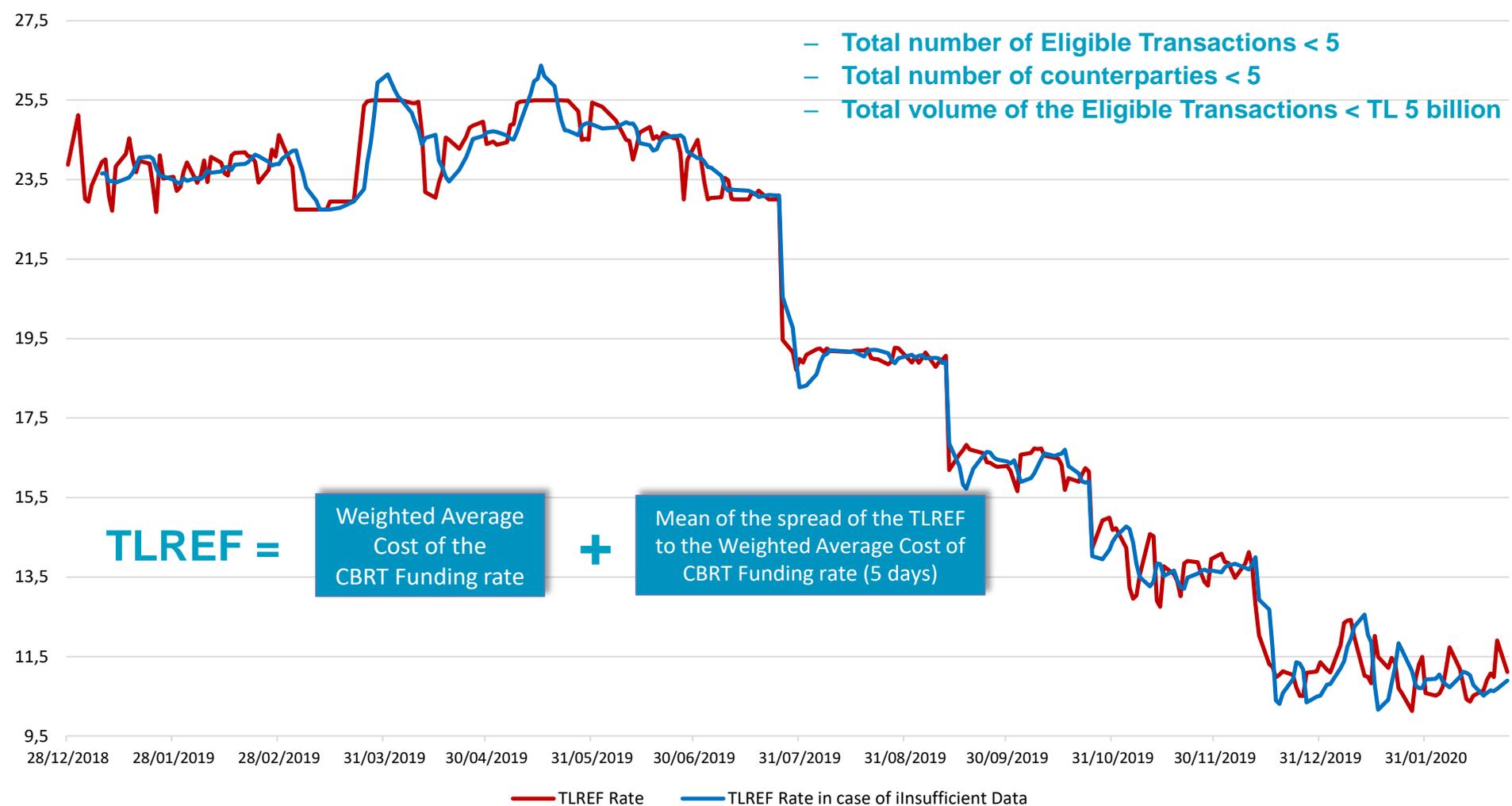
$$Index_t = Index_{t-1} \times \left[1 + TLREF_t \times \frac{g}{365} \right]$$

Calculated index values are shared in a similar way and time as TLREF rate

The starting date of Calculation and Dissemination June 17, 2019

The starting value 1000 (as of June 14, 2019)

Data Insufficiency



TLREF Committee

TLREF Committee

- Oversees the activities regarding the calculation and dissemination
- Undertakes studies to make necessary changes in the rules
- Reviews the current methodology to ensure that it continues to measure the Underlying Interest adequately

Committee is made up of representatives of the

- Central Bank
- Ministry of Treasury and Finance
- The Banks Association
- Turkish Capital Markets Association
- İstanbul Settlement and Custody Bank
- Borsa İstanbul

THANK YOU

index@borsaistanbul.com