SUBMISSION COVER SHEET

IMPORTANT: Check box if Confidential Treatment is requested ☐

Registered Entity Identifier Code (optional): <u>22-463 (1 of 4)</u>

Organization: <u>Chicago Mercantile Exchange Inc. ("CME")</u>

Filing as a: ☒DCM   ☐SEF   ☐DCO   ☐SDR

Please note - only ONE choice allowed.

Filing Date (mm/dd/yy): <u>11/17/22</u>   Filing Description: <u>Initial Listing of the RepoFunds Rate (Germany) Futures, RepoFunds Rate (Germany) – Three-Month Single Contract Basis Spread Futures, RepoFunds Rate (Italy) Futures and RepoFunds Rate (Italy) – Three-Month Single Contract Basis Spread Futures Contracts</u>

SPECIFY FILING TYPE

Please note only ONE choice allowed per Submission.

Organization Rules and Rule Amendments

☐	Certification	§ 40.6(a)
☐	Approval	§ 40.5(a)
☐	Notification	§ 40.6(d)
☐	Advance Notice of SIDCO Rule Change	§ 40.10(a)
☐	SIDCO Emergency Rule Change	§ 40.10(h)

Rule Numbers:

New Product   Please note only ONE product per Submission.

☒	Certification	§ 40.2(a)
☐	Certification Security Futures	§ 41.23(a)
☐	Certification Swap Class	§ 40.2(d)
☐	Approval	§ 40.3(a)
☐	Approval Security Futures	§ 41.23(b)
☐	Novel Derivative Product Notification	§ 40.12(a)
☐	Swap Submission	§ 39.5

Product Terms and Conditions (product related Rules and Rule Amendments)

☐	Certification	§ 40.6(a)
☐	Certification Made Available to Trade Determination	§ 40.6(a)
☐	Certification Security Futures	§ 41.24(a)
☐	Delisting (No Open Interest)	§ 40.6(a)
☐	Approval	§ 40.5(a)
☐	Approval Made Available to Trade Determination	§ 40.5(a)
☐	Approval Security Futures	§ 41.24(c)
☐	Approval Amendments to enumerated agricultural products	§ 40.4(a), § 40.5(a)
☐	"Non-Material Agricultural Rule Change"	§ 40.4(b)(5)
☐	Notification	§ 40.6(d)

Official Name(s) of Product(s) Affected:

Rule Numbers:

Christopher Bowen
Managing Director and Chief Regulatory Counsel
Legal Department

November 17, 2022

<u>**VIA ELECTRONIC PORTAL**</u>

Mr. Christopher J. Kirkpatrick
Office of the Secretariat
Commodity Futures Trading Commission
3 Lafayette Center
1155 21st Street NW
Washington, DC   20581

> **Re:** **CFTC Regulation 40.2(a) Certification. Initial Listing of the RepoFunds Rate (Germany) Futures, RepoFunds Rate (Germany) – Three-Month Single Contract Basis Spread Futures, RepoFunds Rate (Italy) Futures and RepoFunds Rate (Italy) – Three-Month Single Contract Basis Spread Futures Contracts**
> **CME Submission No. 22-463 (1 of 4)**

Dear Mr. Kirkpatrick:

Chicago Mercantile Exchange Inc. ("CME" or "Exchange") is certifying to the Commodity Futures Trading Commission ("CFTC") the initial listing of the RepoFunds Rate (Germany) Futures, RepoFunds Rate (Germany) – Three-Month Single Contract Basis Spread Futures, RepoFunds Rate (Italy) Futures and RepoFunds Rate (Italy) – Three-Month Single Contract Basis Spread Futures contracts (the "Contracts") for trading on the CME Globex electronic trading platform ("CME Globex") and for submission for clearing on CME ClearPort effective Sunday, December 4, 2022 for trade date Monday, December 5, 2022.

Contract Title	CME Rulebook Chapter	CME Globex and CME ClearPort Code
RepoFunds Rate (Germany) Futures	482	RFD
RepoFunds Rate (Germany) – Three-Month Single Contract Basis Spread Futures	483	RSD
RepoFunds Rate (Italy) Futures	484	RFI
RepoFunds Rate (Italy) – Three-Month Single Contract Basis Spread Futures	485	RSI

Section 1 – Contract Specifications

Contract Title	**RepoFunds Rate (Germany) Futures** **RepoFunds Rate (Italy) Futures**	**RepoFunds Rate (Germany) – Three-Month Single Contract Basis Spread Futures** **RepoFunds Rate (Italy) – Three-Month Single Contract Basis Spread Futures**
Rulebook Chapter	482 (Germany) 484 (Italy)	483 (Germany) 485 (Italy)
Commodity Code	RFD (Germany) RFI (Italy)	RSD (Germany) RSI (Italy)
Trading Unit	Interest based on the compounded daily sovereign (Germany or Italy) RepoFunds Rate ("RFR"), such that each basis point per annum of interest = €25 euro per futures contract	Prices shall be quoted as the value of the spread between the expected 3-month Euribor benchmark rate and the expected compounded overnight RFR benchmark rate over the same interest period, expressed as an interest rate per annum such that each basis point per annum of interest shall be worth €25 per futures contract
Price Basis	Contract-grade IMM Index: 100 minus R where: R = Compounded daily sovereign (Germany or Italy) RFR during the contract Reference Quarter, defined as the interval that ends on (and does not include) the third Wednesday of the contract delivery month (IMM Wednesday) and begins on (and includes) the third Wednesday of the third calendar month preceding the contract delivery month, based on TARGET2 good business days. Example: Contract price of 97.2800 IMM Index points signifies R = 2.7200 percent per annum	For daily settlement, prices shall be quoted as the value of the spread between the expected 3-month Euribor benchmark rate and the expected compounded overnight RFR benchmark rate. Final settlement price, occurring 2 TARGET2 business days prior to the third Wednesday of the expiring contract month (IMM Wednesday), shall be equal to the daily settlement price of 3 TARGET2 business days prior to IMM Wednesday. Assignment price into same RFR sovereign contract (RFD or RFI) of same contract named month shall be at 100 minus the 3-Month Euribor, on the final settlement date, plus the final settlement price. For instance, if 3-Month Euribor on the Monday 2 days before IMM Wednesday is 0.7600 percent per annum and the spread settlement on the same day is 0.4500, assignment price will be at the IMM Index value of 99.6900 (100-0.7600+0.4500).
Contract Size	€2500 x contract-grade IMM Index	
Minimum Price Increment	Nearest expiring contract month: .000125 IMM Index Points (0.125 basis point per annum) equal to €3.125 per contract Second nearest expiring contract month: 0.0025 IMM Index points (0.25 basis point per annum) equal to €6.25 per contract All other expiring contract months: 0.005 IMM Index points (0.5 basis point per annum) equal to €12.50 per contract	For all contracts: 0.0025 IMM Index points (0.25 basis point per annum) equal to €6.25 per contract
Listing Schedule	Nearest 8 Quarterly months (Mar, Jun, Sep, Dec), nearest 2 serial months, and 3 contract months in the accrual period Initial listed month: September 2022	Nearest 8 Quarterly months (Mar, Jun, Sep, Dec) and nearest 2 serial months Initial listed month: December 2022
Termination of Trading	4:00 p.m. London time on the TARGET2 business day immediately preceding the third Wednesday three months forward from the expiring contract month	11:00 a.m. Central European Time 2 TARGET2 business days immediately preceding the third Wednesday of the expiring contract month

Delivery	By cash settlement in euro, by reference to Final Settlement Price, on last day of trading. **Final Settlement Price**: Contract-grade IMM Index 100 minus R where: R = Compounded daily RFR during the contract Reference Quarter, defined as the interval that ends on (and does not include) the third Wednesday of the contract delivery month (IMM Wednesday) and begins on (and includes) the third Wednesday of the third calendar month preceding the contract delivery month, based on TARGET2 good business days.	By assignment into same sovereign RFR contract (RFD or RFI) of same contract named month at 100 minus the 3-Month Euribor, on the final settlement date, plus the final settlement price
Trading and Clearing Hours	**CME Globex Pre-Open**: Sunday: 4:00 p.m.-5:00 p.m. Central Time (CT) Monday-Thursday: 4:45 p.m.- 5:00 p.m. CT **CME Globex**: Sunday - Friday 5:00 p.m.-4:00 p.m. CT with a 60-minute break **CME ClearPort**: Sunday 5:00 p.m. - Friday 5:45 p.m. CT with no reporting Monday - Thursday from 5:45 p.m. – 6 p.m. CT	
Block Trade Minimum Threshold	100 contracts - subject to reporting window: 5 minutes RTH / 15 minutes ATH and ETH	
CME Globex Matching Algorithm	A-Allocation	

Section 2 – Overview of RepoFunds Rates and Euribor Indexes

Section 2.1 – RepoFunds Rate

Index Overview

CME Overnight Repo-Backed Benchmarks is a suite of benchmarks administered by CME Group Benchmark Administration Limited ("CBA") and intended to measure the cost of secured one-day repo funding of sovereign bonds issued by a sub-set of eurozone Countries, the United Kingdom and Japan. CBA capitalizes on CME Group's wealth of electronic transaction-based data in the calculation of its indices and benchmarks. CBA is authorized and supervised by the UK Financial Conduct Authority (FCA). CBA is the Benchmark Administrator of the CME Overnight Repo Backed Family of Benchmarks, with CME providing calculation agent and distribution services.

CME Overnight Repo-Backed Benchmark is designed on the basis of industry best practices and the IOSCO Principles for Financial Benchmarks. It is available for use under the UK Benchmark Regulation (BMR).

CBA licenses the use of RFR data to CME Group in accordance with the Intragroup Data License Agreement most recently agreed to on 7/21/2022. This agreement allows CME Group to use the data to develop and promote various products and analytics based on the underlying data.

Methodology
RFR benchmarks are calculated from repo trades that use euro-area sovereign government bonds denominated in euros (in this case, RFR Germany and RFR Italy) as the underlying collateral and that are executed on the BrokerTec Regulated Market operated by CME Amsterdam B.V. and BondVision multilateral trading facility EuroMTS Limited. These RFR benchmarks are calculated on an Act/360 day-count convention.

Repo transactions eligible for inclusion in the calculation of the RFR benchmarks must be executed on one of the regulated trading venues relevant to their respective markets (CME Amsterdam B.V., or EuroMTS Limited) within nominated market hours according to the following requirements:
- Quotes must be available to all dealers on the relevant market prior to being executed (no bilateral or off-platform trades)
- Trades must be centrally cleared
- Have a repo term, from settlement date to maturity date, of one business day
- Settle on the day for which the benchmark is being calculated ("Common Settlement")

- Repo collateral must be any bill, bond, floating-rate note, or inflation-linked bond issued by the sovereign government of the relevant country
- Collateral must be denominated in the respective domestic currencies
- Repo trade must be delivery by value, general collateral or special collateral; however, special collateral trades are filtered out as per the Filtering Algorithm presented below.

Special Collateral Filtering Algorithm
Repo markets execute a mix of trades types, usually described as "general collateral" or "special collateral". Unlike "general collateral," special collateral trades (special trades) precisely identify the International Securities Identification Number (ISIN) of the security to be used as collateral.

Normally this happens when a special security is in high demand and the transacted repo rate tends to be below typical market levels, often by a significant spread. Hence, the calculation algorithm is designed to remove "special trades" from the set of trades used for benchmark calculation. A 25% threshold of the "specials" by number of trades, has been estimated as a suitable threshold for the identification of special trades to be removed from the calculation process.

All repo trades labelled as specials are combined by settlement date and by individual benchmark, and are sorted by descending rate. Then, the bottom 25% of trades are removed from the population, before combining the filtered set with general collateral trades, for the final volume weighted average rate (VWAR) calculation.

Calculation
After the specials filtering process is applied and 25% of special trades have been removed, the remaining set is combined with repo trades labelled as general collateral (GC) to form the set of trades eligible for calculation. Each benchmark is the volume-weighted average rate of eligible repo trades (general collateral and filtered specials), and is calculated as follows:

$$RFR = \frac{\sum_i \text{rate}(i) \times \text{quantity}(i)}{\sum_i \text{quantity}(i)}$$

where $rate(i)$ and $quantity(i)$ are the repo rate and nominal size of repo trade i, and the sum is the total of all repo trades in the defined set of eligible repo trades for that day's benchmark.

Benchmark values are calculated and published up to three (3), rounded decimal places. Normally one-day repo trades are executed at a fixed rate; if transacted at a spread over a reference rate, the resulting rate will be assumed to be fixed and used for the calculation of the benchmarks.

Data Integrity
The input data used for the calculation of the benchmarks are checked by the calculation agent for anomalies once received from each Trading Venue. Each benchmark is calculated and published as long as there is at least one eligible transaction in the observation period. If there are no eligible transactions available to calculate the benchmark, the previous day values will be re-used and published.

The Administrator regularly reviews the underlying markets and reports to the Oversight Committee (appointed by the Administrator to review the integrity of the benchmark, as explained in the Benchmark methodology) any concern caused by persistent lack of transactional activity in a specific benchmark.

Resources

- Benchmark methodology
  - https://www.cmegroup.com/market-data/cme-group-benchmark-administration/files/repofunds-rate-benchmark-methodology.pdf

- IOSCO Compliance Statement

- UK BMR Benchmark Statement
  - o https://www.cmegroup.com/market-data/cme-group-benchmark-administration/files/repofunds-rate-benchmark-statement.pdf

Comparable Indices

Germany and Italy RFR indices are directly comparable to the Secured Overnight Financing Rate ("SOFR") published by the Federal Reserve Bank of New York. Although expectedly lower in volume due to the sizes of the countries involved relative to the United States, RFR and SOFR measure overnight, secured borrowing costs collateralized by government bonds. Transaction volume for both sets of indices is relatively large and consistent, although RFR demonstrates noticeable slowdowns during year end.

Figure 2.1A – RFR and SOFR Indices Comparison
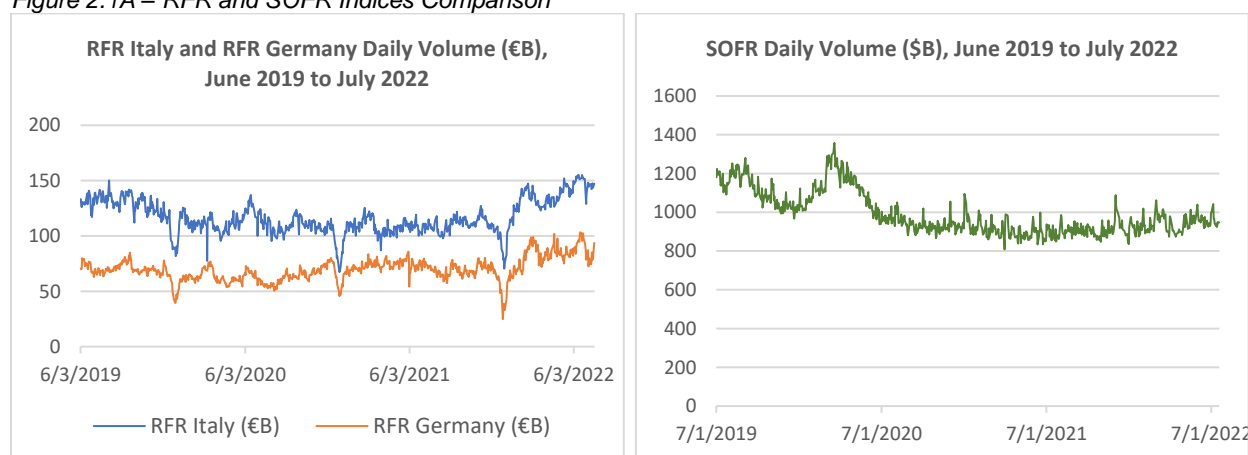
Source: Bloomberg and FRBNY

While SOFR is the direct US comparison because it is both overnight and secured, Euro Short Term Rate (€STR) can be used as a partial comparison – this reference rate is overnight and European-based, but it measures <u>unsecured</u> interbank lending rates, rather than secured rates like with RFR and SOFR. €STR is published on a daily basis by the European Central Bank, and can be accessed via this link:

https://www.ecb.europa.eu/stats/financial_markets_and_interest_rates/euro_short-term_rate/html/eurostr_overview.en.html

Despite not being based on secured lending rates, €STR is reasonably correlated with RFR Italy and RFR Germany after adjusting RFR data by removing quarter and year-end figures. During these periods, certain collateral becomes scarce, which affects the rates at which lenders are willing to accept for the underlying bonds. The removal of these period ends (the last of a quarter or a year) are referred to as "Adjusted" in Figure 2.1B.

Note that the rate of change b/w €STR and German/Italian RFR is highly correlated – this is likely the more useful metric to monitor as it says a change in RFR is likely to coincide with a change in €STR. For instance, the first two rows of Figure 2.1C compare rate values – e.g., on 26 Jul 22, RFR Germany was -0.844 and €STR -0.581, the difference b/w the two (-0.263) reflects both the higher quality German credit and the fact that RFR is secured.

This demonstrates why the rate of change is highly correlated by looking at changes in interest rates by the European Central Bank. On 27 Jul 22, the European Central Bank (ECB) raised interest rates by 0.50. On this day, RFR Germany moved to -0.346 and €STR moved to -0.085, both almost exactly 0.50 higher than the day prior, coinciding with ECB's interest rate move. The spread b/w the two however still remained at -0.261 (-0.346 minus -0.085).

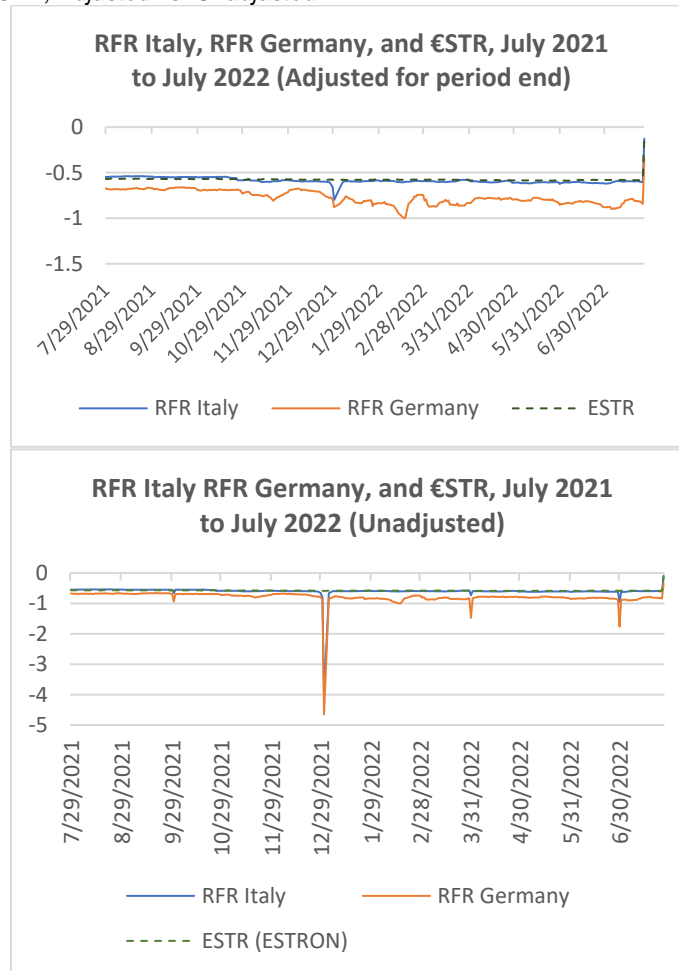*Figure 2.1B – RFR and €STR, Adjusted vs. Unadjusted*

RFR Italy, RFR Germany, and €STR, July 2021 to July 2022 (Adjusted for period end)

Legend: RFR Italy — RFR Germany — - - - ESTR

RFR Italy RFR Germany, and €STR, July 2021 to July 2022 (Unadjusted)

Legend: RFR Italy — RFR Germany — - - - ESTR (ESTRON)

Figure 2.1C – Correlation Table (RFR is adjusted for period end)

Rates	Correlation	Comments
RFR Germany - €STR	0.445	Compares nominal RFR Germany value to nominal €STR value
RFR Italy - €STR	0.791	Compares nominal RFR Italy value to nominal €STR value
RFR Germany Rate of Change - €STR Rate of Change	0.867	Compares rate of RFR Germany value change w/ Rate of €STR value change
RFR Italy Rate of Change - €STR Rate of Change	0.932	Compares rate of RFR Italy value change w/ Rate of €STR value change

Index Overview

Euro Interbank Offered Rate (Euribor), administered by the European Money Markets Institute (EMMI), measures the average interest rate at which large European banks borrow funds in euros from each other on an unsecured basis. Published across 5 tenors (1 week, 1 month, 3 months, 6 months, and 12 months), Euribor is one of the most common reference rates with approximately €100 trillion in contracts tied to it as a reference. It is forward looking, with the rate on a given day representing borrowing rates over the tenor period.

In 2019, it was granted authorization under the Benchmarks Regulation of the European Union (BMR) following reforms taken by EMMI beginning in 2015.

Given its common use as a reference rate, Euribor is also established as an underlying index for derivative contracts. EMMI has well-known and transparent licensing and pricing policies available for exchanges.

Comparable Indices

There is no direct comparable index to Euribor as there is no forward-looking, unsecured, term rate index for Europe other than Euribor. To demonstrate why Euribor is unique, compare it to €STR, as figure 2.2A does below which portrays the forward-looking nature of 3-month Euribor relative to €STR. While €STR represents point-in-time transactions, Euribor transactions price in expected interest rate increases by the ECB over a given period. The spike in July for €STR represents the actual interest rate increase implemented by the ECB.

Figure 2.2A – 3-Month Euribor and €STR
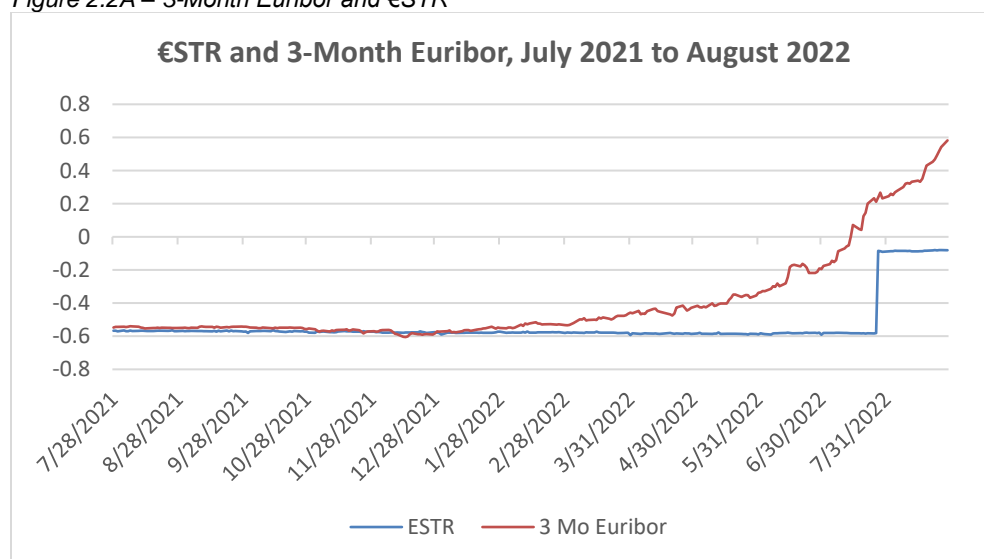
Source: Bloomberg

Indirectly, and for monitoring purposes, the yield for Euro area government debt 3-months forward could be compared with 3-Month Euribor. The ECB published this figure on a daily basis at noon Central European Time. They represent the yields on Euro area government debt over the upcoming three-month period (recall that Euribor is unsecured and not backed by government debt).

Figure 2.2B and 2.2C provide three years of historic rates and correlations between these rates, respectively. These figures are based on weekly average rates to "smooth out" some of the daily yield fluctuations. While using sovereign debt as a comparable to Euribor means that we will pick up a lot of movement that is specific to the sovereign credit market, this comparison may still be useful to track general expectations of three-month debt in the EU. These rates

are strongly correlated with 3-month Euribor: using weekly average rates, the correlation between rate value is 0.892, and the correlation between rate of change in values is 0.692.

The following criteria are applied when selecting bonds:

- Only bonds issued in euro by euro area central government.
- Bonds with special features, including specific institutional arrangements, are excluded.
- Only fixed coupon bonds with a finite maturity and zero coupon bonds are selected, including STRIPS. Perpetual bonds and variable coupon bonds, including inflation-linked bonds, are not included.
- Only actively traded central government bonds with a maximum bid-ask spread per quote of three basis points are selected. The prices/yields are those at close of market on the reference day.
- In order to reflect a sufficient market depth, the residual maturity brackets have been fixed as ranging from three months up to and including 30 years of residual maturity.

More information about Euro area yield curves can be found here:

https://www.ecb.europa.eu/stats/financial_markets_and_interest_rates/euro_area_yield_curves/html/index.en.html

Figure 2.2B – Euro Area Government Bond Yields (3-Month Forward) and 3-Month Euribor
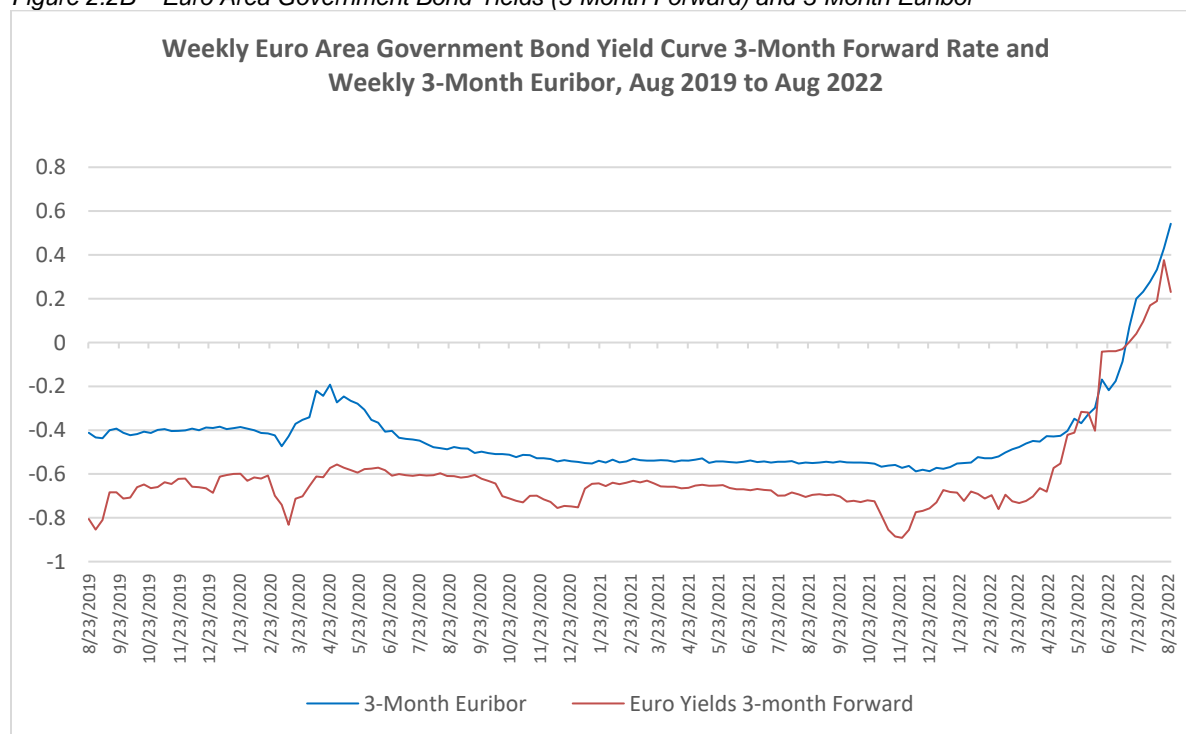
Source: Bloomberg

Figure 2.2C – Euro Area 3-months Forward Yields and 3-Month Euribor Correlation Chart

Rates	Correlation	Comments
Weekly Euro Area Yield – 3-Month Euribor	0.892	Compares Euro Area Yield 3-Month Forward to 3-Month Euribor (weekly)
Weekly Euro Area Yield rate of change – 3-month Euribor rate of change	0.692	Compares Euro Area Yield 3-Month Forward rate of change to 3-Month Euribor rate of change (weekly

Source: Bloomberg

Both ICE Futures Europe and Eurex list a Three-Month Euribor futures contract, with ICE having an entire family of futures and options products based on Euribor, including Options on Three-Month Euribor Futures, and Mid-Curve Options on Three Month Euribor Futures.

ICE is the largest of the two, with total open interest of 4,451,826 as of September 27, 2022 for the Three Month Euribor Future. EMMI licenses 3-Month Euribor data for Futures trading according to this schedule:

https://www.emmi-benchmarks.eu/globalassets/documents/pdf/communication/news/d0253-2022-2023-fee-schedule.pdf

Methodology
Currently a panel of 19 banks across Europe contribute to the construction of various Euribor rates. These banks are selected based active market participation and representative of the region. A full list of these banks can be found here:

https://www.emmi-benchmarks.eu/benchmarks/euribor/panel-banks/

EMMI uses a three tier-ed approach to construct Euribor. According to EMMI:

- "Level 1 consists of contributions based solely on eligible transactions in the unsecured euro money market, with a minimal notional amount of 10 million euros – a criterion which has been amended in 2021 as the amount stood at 20 million previously. The contribution rate of each Panel Bank is calculated using the volume weighted average rate of the eligible transactions by tenor.

- Level 2 consists of contributions based on transactions across the broader money market maturity spectrum. When a Panel Bank has insufficient eligible transactions for a Level 1 contribution to be calculated for a given tenor, but that it has had transactions in nearby maturities, or quite recently, the contribution can be calculated using a range of calculation techniques to make a Level 2 contribution for that same tenor. These can be:
    - An adjusted linear interpolation from adjacent defined tenors
    - Transactions at non-defined tenors
    - Historical Level 1 contributions

- Level 3 consists of contributions based on transactions from a range of markets closely related to the unsecured euro money market. Each Panel Bank uses specific input data, and tailor-made modelling techniques depending on their own funding models

Data input can, for instance and non-exhaustively, consist of transactions that could not be included in Level 1 – like transactions below the 10 million threshold but conducted at market rates – or data from markets closely related to the unsecured euro money market.

Euribor benchmark is supported by a demonstrably large transaction pool, drawn from a diverse set of data sources, as noted in Figure 3A.

All Level 3 contributions made by a Panel Bank must be duly documented, validated, and always applied in a consistent fashion, under the guidance of The European Money Markets Institute."

Calculation

After determining eligibility according to the above methodology, the highest 15% and lowest 15% of submitted interest rates are eliminated, and the arithmetic mean of the remaining rates is used to calculate the Euribor for the day and tenor.

Data Integrity
EMMI employs a robust governance framework to ensure the reliability and integrity of Euribor. An Oversight Committee, comprised of at least ten independent subject-matter-experts, monitors the administration of the benchmark.

In addition, the calculation agent ensures that data inputs and outputs are validated. Major actions taken by the calculation agent include:

a) the efficient and timely operation of the daily Euribor determination process as defined in the Benchmark Determination Methodology for Euribor ("BDM"), with due regard for upholding the quality of the benchmark determination;
b) pre- and post-calculation data controls defined by EMMI;
c) the accurate and timely dissemination of the calculated Euribor rates to the authorized Data Vendors for publication;
d) the handling of access rights for authorized contributors to Euribor, in accordance with EMMI's instructions;
e) the regular reporting to EMMI on the quality of data submissions, including absent or persistently erroneous submissions;
f) the record retention of daily calculation events, actions taken and communications with Panel Banks;
g) immediately escalate to EMMI any significant issue that occurs during the calculation of Euribor, including but not limited to, contingency, business continuity and disaster recovery.

Source: https://www.emmi-benchmarks.eu/benchmarks/euribor/governance/

Resources

- Benchmark methodology
  - https://www.emmi-benchmarks.eu/benchmarks/euribor/methodology/

- Euribor Benchmark Statement
  - https://www.emmi-benchmarks.eu/globalassets/documents/pdf/euribor/d0246d-2019-euribor-benchmark-statement-update-01-2021.pdf

- Full Governance Materials
  - https://www.emmi-benchmarks.eu/benchmarks/euribor/governance/

- Transparency Reports
  - https://www.emmi-benchmarks.eu/transparency-indicator-reports/

Section 3 – Compliance with Core Principles

The Exchange has reviewed the designated contracts market core principles ("Core Principles") as set forth in the Commodity Exchange Act ("CEA" or the "Act") and has identified that the Contracts may bear upon the following Core Principles:

Core Principle 2 – Compliance with Rules
Trading in the Contracts shall be subject to:

- CME Rulebook Chapter 4, which includes prohibitions against fraudulent, noncompetitive, unfair, and abusive practices;
- the Exchange's trade practice rules, the majority of which are contained in Chapter 5 and Chapter 8 of the Rulebook; and
- monitoring and surveillance by CME Group's Market Regulation Department, which has the authority to exercise its investigatory and enforcement power where potential rule violations are identified.

Core Principle 3 – Contracts Not Readily Subject to Manipulation

As detailed in Section 2 and Figure 3A below, the RFR benchmarks and Euribor benchmark are each supported by a demonstrably large transaction pool, drawn from a diverse set of data sources. Moreover, the statistical measure employed to produce the benchmarks on any given day – the transaction-volume-weighted average repo rate -- is highly robust.

In view of these considerations, both the benchmarks themselves and their application in connection with the Contracts possess more than sufficient integrity to deflect attempted cornering, manipulation, crowding, or exertion of undue influence upon final settlement of expiring Contracts.

Figure 3A – Daily Average Transaction Data by Month

	3-mo Euribor Volume (€B)	3-mo Euribor Transaction Count	RFR Italy Volume (€B)	RFR Italy Transaction Count	RFR Germay Volume (€B)	RFR Germay Transaction Count
	Supporting Transaction Data - Daily Averages by Month					
Jun-22	8.3	N/A	149	4260	93	2820
May-22	13.6	N/A	143	4306	84	2638
Apr-22	13.3	N/A	132	4152	86	2625
Mar-22	6.1	N/A	130	4121	86	2717
Feb-22	6.7	N/A	138	4395	81	2615
Jan-22	11.5	N/A	113	3682	63	2243
Dec-21	7.1	N/A	98	3355	56	2015
Nov-21	8.4	N/A	115	3758	74	2511
Oct-21	6.5	N/A	111	3679	67	2497
Sep-21	10.5	N/A	114	3731	70	2509
Aug-21	6.6	N/A	104	3363	64	2325
Jul-21	12.5	N/A	109	3394	72	2562
Jun-21	3.6	N/A	107	3334	72	2225
May-21	7.7	N/A	109	3430	77	2471
Apr-21	8.0	N/A	104	3367	74	2388
Mar-21	6.7	N/A	109	3398	75	2230
Feb-21	6.1	N/A	112	3477	71	2214
Jan-21	12.7	N/A	104	3322	67	2057
Dec-20	4.8	N/A	96	3074	68	2014
Nov-20	5.6	N/A	107	3293	70	2099
Oct-20	6.5	N/A	112	3047	65	2083
Sep-20	3.9	N/A	112	3037	65	1946
Aug-20	5.0	N/A	103	2890	58	1809
Jul-20	8.9	N/A	112	3028	56	1859
Jun-20	8.0	N/A	123	3195	66	2002
May-20	11.8	N/A	113	3045	60	1901
Apr-20	5.6	N/A	105	3022	58	1892
Mar-20	4.2	N/A	111	3038	70	2065
Feb-20	4.4	N/A	110	3044	63	1961
Jan-20	5.9	N/A	112	3060	63	1900
Avg.	7.7	N/A	114	3443	70	2240

Source: EMMI and Bloomberg
Figure 3B – Four Weeks of Trading Data

	RFR Italy				RFR Germany		
Date	Volume (€MM)	Trade Count	Avg Trade Size (€MM)		Volume (€MM)	Trade Count	Avg Trade Size (€MM)
7/27/2022	155,614	4,394	35		95,447	2,820	34
7/26/2022	149,430	4,517	33		80,096	2,550	31
7/25/2022	149,923	4,619	32		73,941	2,461	30
7/22/2022	155,226	4,492	35		75,398	2,645	29
7/21/2022	151,721	4,553	33		81,205	2,776	29
7/20/2022	147,598	4,110	36		86,379	2,651	33
7/19/2022	150,265	4,442	34		89,432	2,703	33
7/18/2022	147,337	4,264	35		93,648	2,671	35
7/15/2022	143,491	4,104	35		79,510	2,612	30
7/14/2022	147,598	4,453	33		78,686	2,608	30
7/13/2022	142,875	4,031	35		85,069	2,610	33
7/12/2022	142,353	4,113	35		77,771	2,407	32
7/11/2022	146,967	4,282	34		74,439	2,556	29
7/8/2022	146,251	4,328	34		79,779	2,540	31
7/7/2022	145,458	4,186	35		74,526	2,701	28
7/6/2022	144,521	4,108	35		75,758	2,648	29
7/5/2022	147,762	4,115	36		72,603	2,589	28
7/4/2022	148,138	4,311	34		87,123	2,682	32
7/1/2022	137,581	4,106	34		81,531	2,655	31

Source: CBA Data

Core Principle 4 – Prevention of Market Disruption
Trading in the Contracts shall be subject to CME Rulebook Chapters 4 and 7, which include prohibitions on manipulation, price distortion, and disruption to the expiration process. As with any product listed for trading on a CME Group designated contract market, futures trading activity shall be subject to monitoring and surveillance by CME Group's Market Regulation Department.

Core Principle 5 – Position Limits or Accountability
The Exchange is recommending RepoFunds Rate Futures (both outrights and spreads) be subject to a Position Reporting Level of 850 contracts, a Single-Month Position Accountability Level of 10,000 net futures contract equivalents, and an All-Month Position Accountability Level of 10,000 net futures contract equivalents. RepoFunds Rate (Germany) – Three-Month Single Contract Basis Spread Futures and RepoFunds Rate (Italy) – Three-Month Single Contract Basis Spread Futures will aggregate into their respective sovereign Outright futures on a 1:1 ratio.

To appreciate the proportions of these Position Accountability standards, consider that the representative level of traffic in the market for which trading activity supports the RFR Germany (the lower volume of the two benchmarks) benchmark is about €69 billion per day. Relative to this trading flow, the hypothetical holdings reflected in the Position Accountability Levels for RepoFunds Rate Futures Germany signify 0.04% as a percent of the Contract Unit of €2500.

The proposed Reporting Level and Accountability Levels would mirror those of CME's Three-Month Eurodollar and Three-Month SOFR Futures contracts.

Core Principle 7 – Availability of General Information
The Exchange disseminated a Special Executive Report ("SER") that sets forth information regarding the specifications, terms, and conditions of the Contracts. The SER is also posted on CME Group's website.

Core Principle 8 – Daily Publication of Trading Information
The Exchange shall publish trading volumes, open interest levels, and price information for the Contracts daily on its website and through quote vendors.

Core Principle 9 – Execution of Transactions
The Contracts will be available for trading on CME Globex, which provides for efficient, competitive, and open execution of transactions. Additionally, CME Globex affords reliability and global connectivity. The applicable CME Globex non-reviewable trading ranges shall be as set forth in Appendix F. The Contracts will also be available for clearing via CME ClearPort.

Core Principle 10 – Trade Information
All requisite trade information will be included in the audit trail and will suffice for the Market Regulation Department to monitor for market abuse.

Core Principle 11 – Financial Integrity of Contracts
The transactions in the Contract will be cleared by CME Clearing, which is registered with the Commission as a derivatives clearing organization, and which is subject to all CFTC regulations related thereto.

Core Principle 12 – Protection of Markets and Market Participants
CME Rulebook Chapters 4 and 5 set forth multiple strictures that preclude intermediaries from disadvantaging their customers. These Rules apply to trading in all of the Exchange's competitive trading venues and will apply to transactions in the Contract.

Core Principle 13 – Disciplinary Procedures
CME Rulebook Chapter 4 provides for the Exchange to discipline, suspend, or expel members or market participants who violate the rules of the Exchange. Trading in the Contracts will be subject to these provisions. The Exchange's Market Regulation Department has the authority to exercise its powers of enforcement, in the event that rule violations in the Contract are identified.

Core Principle 14 – Dispute Resolution
Disputes in respect of the Contracts are subject to the arbitration provisions set forth in CME Rulebook Chapter 6, which allow all nonmembers to submit to arbitration claims for financial loss resulting from transactions on the Exchange. Pursuant to these provisions, any member named as a respondent in any such claim submitted by a nonmember is required to participate in arbitration proceedings. Additionally, the Exchange requires members to resolve via arbitration all disputes concerning transactions on the Exchange.

Pursuant to Section 5c(c) of the Act and Regulation 40.2(a), the Exchange certifies that the Contracts comply with the Act, including all regulations thereunder. There were no substantive opposing views to this proposal.

The Exchange certifies that this submission has been concurrently posted on the Exchange's website at http://www.cmegroup.com/market-regulation/rule-fillings.html.

Should you have any questions concerning the above, please contact the undersigned at (212) 299-2200 or CMEGSubmissionInquiry@cmegroup.com.

Sincerely,

/s/ Christopher Bowen
Managing Director and Chief Regulatory Counsel

Attachments: Appendix A   CME Rulebook Chapter 482
                                 Appendix B   CME Rulebook Chapter 483
                                 Appendix C   CME Rulebook Chapter 484
                                 Appendix D   CME Rulebook Chapter 485
                                 Appendix E   Position Limit, Position Accountability, and Reportable Level Table (attached under separate cover)
                                 Appendix F   CME Rule 588.H. – ("Globex Non-Reviewable Trading Ranges") Table
                                 Appendix G   CME Rule 589. Special Price Fluctuation Limits and Daily Price Limits Table
                                 Appendix H   Exchange Fees
                                 Appendix I   Daily Settlement Procedure Documents

Appendix A
CME Rulebook

Chapter 482
RepoFunds Rate (Germany) Futures

48200. **SCOPE OF CHAPTER**

This chapter is limited in application to RepoFunds Rate (Germany) Futures ("futures" or "contract"). In addition to this chapter, the futures shall be subject to the general rules and regulations of the Exchange insofar as applicable.

For purposes of this chapter, unless otherwise specified, times referred to herein shall refer to and indicate London time.

48201. **CONTRACT SPECIFICATIONS**

Each contract is valued at €2,500 times the contract-grade IMM Index (Rule 48202.C.).

48202. **TRADING SPECIFICATIONS**

48202.A. **Trading Schedule**

Futures contracts shall be scheduled for trading and delivery during such hours and in such months as may be determined by the Exchange.

48202.B. **Trading Unit**

For a contract for a given delivery month, the unit of trading shall be compounded daily RepoFunds Rate Germany ("RFR Germany") interest during such contract's reference period subject to Rule 48203., expressed as an interest rate per annum for which (i) such interest rate shall be on the basis of the actual number of days in such delivery reference period, divided by a 360-day year, and (ii) each basis point per annum of such interest rate shall be worth €25 per futures contract. RFR Germany shall be as published by CME Benchmark Administration ("CBA").

48202.C. **Price Increments**

Contract prices shall be quoted in terms of the IMM Index, 100.0000 minus interest rate per annum correspondent to RFR Germany during the contract delivery month, as specified in Rule 48202.B.

> Example: If RFR Germany is 2.0275 percent per annum, it shall be quoted as an IMM Index value of 97.9725.

The minimum price fluctuation shall be 0.00125 for the first nearby contract closest to final expiry, equal to €3.125 per contract; 0.0025 for the second nearby contract that is second closest to final expiry, equal to €6.25 per contract; and 0.005 for all other contracts, equal to €12.50 per contract.

48202.D. **Position Limits, Exemptions, Position Accountability and Reportable Levels**

The applicable position limits and/or accountability levels, in addition to the reportable levels, are set forth in the Position Limit, Position Accountability and Reportable Level Table in the Interpretations & Special Notices Section of Chapter 5.

A person seeking an exemption from position limits for bona fide commercial purposes shall apply to the Market Regulation Department on forms provided by the Exchange, and the Market Regulation Department may grant qualified exemptions in its sole discretion.

Refer to Rule 559 for requirements concerning the aggregation of positions and allowable exemptions from the specified position limits.

48202.E. **[Reserved]**

48202.F. **Special Price Fluctuation Limits**

At the commencement of each trading day, the contract shall be subject to special price fluctuation limits as set forth in Rule 589 and in the Special Price Fluctuation Limits and Daily Price Limits Table in the Interpretations & Special Notices Section of Chapter 5.

48202.G. **Termination of Trading**

Trading in an expiring contract shall terminate at the close of trading on the TARGET2 business day immediately preceding the third Wednesday three months forward from the expiring contract month.

48202.H.   [Reserved]

48203.   SETTLEMENT PROCEDURES

Delivery shall be by cash settlement.

48203.A.   Final Settlement Price

1. Definition of Reference Quarter

For a contract for a given delivery month, the Reference Quarter shall be the interval that ends on (and does not include) the third Wednesday of the contract delivery month, and that begins on (and includes) the third Wednesday of the third calendar month preceding the contract delivery month.

Example: For a hypothetical contract for which the delivery month is March 2022, the contract Reference Quarter shall start on (and shall include) the third Wednesday of December 2021 (December 15, 2021) and shall end on (and shall not include) the third Wednesday of March 2022 (March 16, 2022).

2. Definition of Final Settlement Price

For a contract for a given delivery month, the Final Settlement Price shall be 100 minus compounded daily RFR Germany during the contract Reference Quarter, as follows:

Final Settlement Price   =   100   -   R

where

$$R \ = \ \left[\ \Pi_{i=1\ldots n} \{1+(d_i/360)*(r_i/100)\} \ - \ 1 \ \right] \ \times \ (360/D) \ \times \ 100$$

n =the number of TARGET2 market business days ("cash business days")
during such Reference Quarter.

i =   is the running variable that indexes each cash business day in such Reference Quarter, such that i takes the values $i = 1,2,\ldots,(n-1),n$.

$\Pi_{i=1\ldots n}$ denotes the product of the values indexed by the running variable, $i = 1,2,\ldots,n$.

r_i the RFR Germany value corresponding to cash business day i, expressed as an interest rate per annum.

Example: If RFR Germany for the ith cash business day is two and one quarter percent, then
$r_i = 2.25$.

d_i =   the number of calendar days to which r_i applies. For any calendar day that is not a cash business day (eg, weekend days, TARGET2 market holidays), the applicable value shall be RFR Germany for the immediately preceding cash business day.

Examples: If the ith day is a Monday, a Tuesday, a Wednesday, or a Thursday, and if the next following calendar day is a cash business day, then $d_i = 1$. If the ith day is a Friday, and if the next following Monday is a cash business day, then $d_i = 3$.

D = the number of calendar days in the Reference Quarter: $D = \Sigma_{i=1\ldots n} \, d_i$.

48203.B.   Final Settlement

Clearing members holding open positions in a contract at the time of termination of trading in that contract shall make payment to or receive payment from the Clearing House in accordance with normal variation performance bond procedures based on a settlement price equal to the final settlement price.

48204. [RESERVED]

Appendix B
CME Rulebook

Chapter 483
RepoFunds Rate (Germany) – Three-Month Single Contract Basis Spread Futures

48300.   SCOPE OF CHAPTER

This chapter is limited in application to RepoFunds Rate (Germany) – Three-Month Single Contract Basis Spread Futures ("Spread Futures," "futures" or "contract"). In addition to this chapter, the futures shall be subject to the general rules and regulations of the Exchange insofar as applicable.

For purposes of this chapter, unless otherwise specified, times referred to herein shall refer to and indicate London time.

48301.   CONTRACT SPECIFICATIONS

Each contract is valued at €2,500 times the contract-grade IMM Index (Rule 48302.C.).

48302.   TRADING SPECIFICATIONS

48302.A.   Trading Schedule

Futures contracts shall be scheduled for trading and delivery during such hours and in such months as may be determined by the Exchange.

48302.B.   Trading Unit

For a contract for a given delivery month, prices shall be quoted as the value of the spread between the expected 3-month Euribor benchmark rate and the expected compounded overnight RepoFunds Rate Germany ("RFR Germany") benchmark rate over the same interest period, expressed as an interest rate per annum such that each basis point per annum of interest shall be worth €25 per futures contract.

48302.C.   Price Increments

Daily Contract prices shall be quoted as the value of the expected spread as specified in Rule 48302.B.

Example: If the value of the spread between the expected annualized rate of the 3-Month Euribor and the expected annualized rate of the compounded overnight RFR Germany benchmark rate over the same interest period is 0.4500, the daily price shall be quoted as 0.4500.

The minimum price fluctuation shall be 0.0025, equal to €6.25 per contract.

48302.D.   Position Limits, Exemptions, Position Accountability and Reportable Levels

The applicable position limits and/or accountability levels, in addition to the reportable levels, are set forth in the Position Limit, Position Accountability and Reportable Level Table in the Interpretations & Special Notices Section of Chapter 5.

A person seeking an exemption from position limits for bona fide commercial purposes shall apply to the Market Regulation Department on forms provided by the Exchange, and the Market Regulation Department may grant qualified exemptions in its sole discretion.

Refer to Rule 559 for requirements concerning the aggregation of positions and allowable exemptions from the specified position limits.

48302.E.   [Reserved]

48302.F.   Special Price Fluctuation Limits

At the commencement of each trading day, the contract shall be subject to special price fluctuation limits as set forth in Rule 589 and in the Special Price Fluctuation Limits and Daily Price Limits Table in the Interpretations & Special Notices Section of Chapter 5.

48302.G.   Termination of Trading

Trading in an expiring contract shall terminate upon the dissemination of the 3-month Euribor at 11:00 a.m. Central European Time two TARGET2 business days immediately preceding the third Wednesday of the expiring contract month

48302.H.   [Reserved]

48303.   SETTLEMENT PROCEDURES

Delivery shall be exercised into a financial futures contract.

48303.A.   Final Settlement Price

Final settlement price, occurring two TARGET2 business days prior to the third Wednesday of the expiring contract month (IMM Wednesday), shall be equal to the daily settlement price on three TARGET2 business days prior to IMM Wednesday.

Assignment price into RFR Germany contract (RFD) of same contract named month shall be at 100 minus the 3-Month Euribor, on the final settlement date, plus the final settlement price.

> Example: If 3-Month Euribor on the Monday two days before IMM Wednesday is 0.7600 percent per annum and the spread settlement on the same day is 0.4500, assignment price will be at the IMM Index value of 99.6900 (100-0.7600+0.4500).

48303.B.   Final Settlement

Clearing members holding open positions in a contract at the time of termination of trading in that contract shall make payment to or receive payment from the Clearing House in accordance with normal variation performance bond procedures based on a settlement price equal to the final settlement price.

48304.   [RESERVED]

Appendix C
CME Rulebook

Chapter 484
RepoFunds Rate (Italy) Futures

48400.   SCOPE OF CHAPTER

This chapter is limited in application to RepoFunds Rate (Italy) Futures ("futures" or "contract"). In addition to this chapter, the futures shall be subject to the general rules and regulations of the Exchange insofar as applicable.

For purposes of this chapter, unless otherwise specified, times referred to herein shall refer to and indicate London time.

48401.   CONTRACT SPECIFICATIONS

Each contract is valued at €2,500 times the contract-grade IMM Index (Rule 48402.C.).

48402.   TRADING SPECIFICATIONS

48402.A.   Trading Schedule

Futures contracts shall be scheduled for trading and delivery during such hours and in such months as may be determined by the Exchange.

48402.B.   Trading Unit

For a contract for a given delivery month, the unit of trading shall be compounded daily RepoFunds Rate Italy ("RFR Italy") interest during such contract's reference period subject to Rule 48403., expressed as an interest rate per annum for which (i) such interest rate shall be on the basis of the actual number of days in such delivery reference period, divided by a 360-day year, and (ii) each basis point per annum of such interest rate shall be worth €25 per futures contract. RFR Italy shall be as published by CME Benchmark Administration ("CBA").

48402.C.   Price Increments

Contract prices shall be quoted in terms of the IMM Index, 100.0000 minus interest rate per annum correspondent to RFR Italy during the contract delivery month, as specified in Rule 48402.B.

> Example: If RFR Italy is 2.0275 percent per annum, it shall be quoted as an IMM Index value of 97.9725.

The minimum price fluctuation shall be 0.00125 for the first nearby contract closest to final expiry, equal to €3.125 per contract; 0.0025 for the second nearby contract that is second closest to final expiry, equal to €6.25 per contract; and 0.005 for all other contracts, equal to €12.50 per contract.

48402.D.   Position Limits, Exemptions, Position Accountability and Reportable Levels

The applicable position limits and/or accountability levels, in addition to the reportable levels, are set forth in the Position Limit, Position Accountability and Reportable Level Table in the Interpretations & Special Notices Section of Chapter 5.

A person seeking an exemption from position limits for bona fide commercial purposes shall apply to the Market Regulation Department on forms provided by the Exchange, and the Market Regulation Department may grant qualified exemptions in its sole discretion.

Refer to Rule 559 for requirements concerning the aggregation of positions and allowable exemptions from the specified position limits.

48402.E.   [Reserved]

48402.F.   Special Price Fluctuation Limits

At the commencement of each trading day, the contract shall be subject to special price fluctuation limits as set forth in Rule 589 and in the Special Price Fluctuation Limits and Daily Price Limits Table in the Interpretations & Special Notices Section of Chapter 5.

48402.G.   Termination of Trading

Trading in an expiring contract shall terminate at the close of trading on the TARGET2 business day immediately preceding the third Wednesday three months forward from the expiring contract month.

48402.H.   [Reserved]

48403.   SETTLEMENT PROCEDURES

Delivery shall be by cash settlement.

48403.A.   Final Settlement Price

1. Definition of Reference Quarter

For a contract for a given delivery month, the Reference Quarter shall be the interval that ends on (and does not include) the third Wednesday of the contract delivery month, and that begins on (and includes) the third Wednesday of the third calendar month preceding the contract delivery month.

Example: For a hypothetical contract for which the delivery month is March 2022, the contract Reference Quarter shall start on (and shall include) the third Wednesday of December 2021 (December 15, 2021) and shall end on (and shall not include) the third Wednesday of March 2022 (March 16, 2022).

2. Definition of Final Settlement Price

For a contract for a given delivery month, the Final Settlement Price shall be 100 minus compounded daily RFR Italy during the contract Reference Quarter, as follows:

Final Settlement Price   =   100 -   R

where

$$R = \left[\prod_{i=1\ldots n} \{1+(d_i/360)*(r_i/100)\} - 1 \right] \times (360/D) \times 100$$

n =the number of TARGET2 market business days ("cash business days")
during such Reference Quarter.

i =   is the running variable that indexes each cash business day in such Reference Quarter, such that i takes the values $i = 1,2,\ldots,(n-1),n$.

$\prod_{i=1\ldots n}$ denotes the product of the values indexed by the running variable, $i = 1,2,\ldots,n$.

r_i the RFR Italy value corresponding to cash business day i, expressed as an interest rate per annum.

Example: If RFR Italy for the ith cash business day is two and one quarter percent, then
$r_i = 2.25$.

d_i =   the number of calendar days to which r_i applies. For any calendar day that is not a cash business day (eg, weekend days, TARGET2 market holidays), the applicable value shall be RFR Italy for the immediately preceding cash business day.

Examples: If the ith day is a Monday, a Tuesday, a Wednesday, or a Thursday, and if the next following calendar day is a cash business day, then $d_i = 1$. If the ith day is a Friday, and if the next following Monday is a cash business day, then $d_i = 3$.

D = the number of calendar days in the Reference Quarter: $D = \sum_{i=1\ldots n} d_i$.

48403.B.   Final Settlement

Clearing members holding open positions in a contract at the time of termination of trading in that contract shall make payment to or receive payment from the Clearing House in accordance with normal variation performance bond procedures based on a settlement price equal to the final settlement price.

48404. [RESERVED]

Appendix D
CME Rulebook

Chapter 485
RepoFunds Rate (Italy) – Three-Month Single Contract Basis Spread Futures

48500.   SCOPE OF CHAPTER

This chapter is limited in application to RepoFunds Rate (Italy) – Three-Month Single Contract Basis Spread Futures ("Spread Futures," "futures" or "contract"). In addition to this chapter, the futures shall be subject to the general rules and regulations of the Exchange insofar as applicable.

For purposes of this chapter, unless otherwise specified, times referred to herein shall refer to and indicate London time.

48501.   CONTRACT SPECIFICATIONS

Each contract is valued at €2,500 times the contract-grade IMM Index (Rule 48502.C.).

48502.   TRADING SPECIFICATIONS

48502.A.   Trading Schedule

Futures contracts shall be scheduled for trading and delivery during such hours and in such months as may be determined by the Exchange.

48502.B.   Trading Unit

For a contract for a given delivery month, prices shall be quoted as the value of the spread between the expected 3-month Euribor benchmark rate and the expected compounded overnight RepoFunds Rate Italy ("RFR Italy") benchmark rate over the same interest period, expressed as an interest rate per annum such that each basis point per annum of interest shall be worth €25 per futures contract.

48502.C.   Price Increments

Daily Contract prices shall be quoted as the value of the expected spread as specified in Rule 48502.B.

Example: If the value of the spread between the expected annualized rate of the 3-Month Euribor and the expected annualized rate of the compounded overnight RFR Italy benchmark rate over the same interest period is 0.4500, the daily price shall be quoted as 0.4500.

The minimum price fluctuation shall be 0.0025, equal to €6.25 per contract.

48502.D.   Position Limits, Exemptions, Position Accountability and Reportable Levels

The applicable position limits and/or accountability levels, in addition to the reportable levels, are set forth in the Position Limit, Position Accountability and Reportable Level Table in the Interpretations & Special Notices Section of Chapter 5.

A person seeking an exemption from position limits for bona fide commercial purposes shall apply to the Market Regulation Department on forms provided by the Exchange, and the Market Regulation Department may grant qualified exemptions in its sole discretion.

Refer to Rule 559 for requirements concerning the aggregation of positions and allowable exemptions from the specified position limits.

48502.E.   [Reserved]

48502.F.   Special Price Fluctuation Limits

At the commencement of each trading day, the contract shall be subject to special price fluctuation limits as set forth in Rule 589 and in the Special Price Fluctuation Limits and Daily Price Limits Table in the Interpretations & Special Notices Section of Chapter 5.

48502.G.   Termination of Trading

Trading in an expiring contract shall terminate upon the dissemination of the 3-month Euribor at 11:00 a.m. Central European Time two TARGET2 business days immediately preceding the third Wednesday of the expiring contract month

48502.H.   [Reserved]

48503.   SETTLEMENT PROCEDURES

Delivery shall be exercised into a financial futures contract.

48503.A.   Final Settlement Price

Final settlement price, occurring two TARGET2 business days prior to the third Wednesday of the expiring contract month (IMM Wednesday), shall be equal to the daily settlement price on three TARGET2 business days prior to IMM Wednesday.

Assignment price into RFR Italy contract (RFI) of same contract named month shall be at 100 minus the 3-Month Euribor, on the final settlement date, plus the final settlement price.

> Example: If 3-Month Euribor on the Monday two days before IMM Wednesday is 0.7600 percent per annum and the spread settlement on the same day is 0.4500, assignment price will be at the IMM Index value of 99.6900 (100-0.7600+0.4500).

48503.B.   Final Settlement

Clearing members holding open positions in a contract at the time of termination of trading in that contract shall make payment to or receive payment from the Clearing House in accordance with normal variation performance bond procedures based on a settlement price equal to the final settlement price.

48504.   [RESERVED]

Appendix E

**CME Rulebook
Chapter 5
("Trading Qualifications and Practices")
Position Limit, Position Accountability, and Reportable Level Table**
(additions underscored)
(attached under separate cover)

**Appendix F
CME Rulebook
Chapter 5
("Trading Qualifications and Practices")
CME Rule 588.H. ("Globex Non-Reviewable Trading Ranges") Table**
(additions underscored)

Instrument	Globex Symbol	Globex Non-Reviewable Ranges (NRR)	NRR: Global Format	NRR: Minimum Ticks	NRR: Globex Format	NRR: Minimum Ticks
RepoFunds Rate (Germany) Futures - Front Month and RepoFunds Rate (Italy) Futures - Front Month	RFD / RFI	2.5 basis points	2.5	20	Each leg evaluated as an outright	
RepoFunds Rate (Germany) Futures – 2nd Nearby Contract this is 2nd closest to final expiry and RepoFunds Rate (Italy) Futures - 2nd Nearby Contract this is 2nd closest to final expiry	RFD / RFI	2.5 basis points	2.5	10	Each leg evaluated as an outright	
RepoFunds Rate (Germany) Futures - All Others and RepoFunds Rate (Italy) Futures - All Others	RFD / RFI	2.5 basis points	2.5	5	Each leg evaluated as an outright	
RepoFunds Rate (Germany) - Three-Month Single Contract Basis Spread Futures and RepoFunds Rate (Italy) - Three-Month Single Contract Basis Spread Futures	RSD / RSI	2.5 basis points	2.5	10	Each leg evaluated as an outright	

**Appendix G
CME Rulebook
Chapter 5
("Trading Qualifications and Practices")
CME Rule 589. – Special Price Fluctuation Limits and Daily Price Limits Table**

Product	Rulebook Chapter	Commodity Code	PRIMARY / ASSOCIATED	ASSOCIATED WITH	Dynamically Calculated Variant - All Hours
RepoFunds Rate (Germany) Futures and RepoFunds Rate (Italy) Futures	482 / 484	RFD / RFI	Primary	Primary	50 basis points
RepoFunds Rate (Germany) - Three-Month Single Contract Basis Spread Futures and RepoFunds Rate (Italy) - Three-Month Single Contract Basis Spread Futures	483 / 485	RSD / RSI	Associated	RFD / RFI	-

Appendix H
Exchange Fees

Membership Type	Venue/Transaction	Fee
Individual Members Clearing Members Rule 106.J Equity Member Firms & Rule 106.J Qualified Subsidiaries Rule 106.I Members & Rule 106.I Qualified Affiliates Rule 106.S Member Approved Funds	CME Globex	$0.19
	EFP|EFR|Block	$0.29
	Delivery	$0.09
Rule 106.D Lessees Rule 106.F Employees	CME Globex	$0.37
	EFP|EFR|Block	$0.50
	Delivery	$0.30
Rule 106.R Electronic Corporate Members (For other than CME Globex, EFP, EFR, Block - Non-Member rates apply)	CME Globex	$0.49
	EFP|EFR|Block	$0.90
Rule 106.H and 106.N Firms Clearing Non-Equity Member Firms	CME Globex	$0.49
	EFP|EFR|Block	$0.69
	Delivery	$0.49
International Incentive Program (IIP) Participants International Volume Incentive Program (IVIP) Participants	CME Globex	$0.50
	EFP|EFR|Block	$1.35
	Delivery	$0.50
Central Bank Incentive Program (CBIP) Participants Latin American Fund Manager Incentive Program (FMIP) Participants	CME Globex	$0.75
	EFP|EFR|Block	$1.35
	Delivery	$0.70
Members Trading Outside of Division (For other than CME Globex During ETH - Non-Member rates apply)	CME Globex During ETH Only	$0.80
Non-Members	CME Globex	$1.25
	CME Globex - Bundles	$0.80
	EFP|EFR|Block	$1.35
	Delivery	$0.70

Processing Fees	Fee
Position Adjustment/Position Transfer	$0.10
Give-Up Surcharge	$0.05
Facilitation Fee	$0.00

Appendix I
Daily Settlement Procedure Documents

Normal Daily Settlement Procedures for the RepoFunds Rate (Germany) Futures Contract (RFD) and RepoFunds Rate (Italy) Futures Contract (RFI)

All Contract Months in their Interest Accrual Period (RFD/RFI)

Serial and Quarterly contract months that are in their accrual period (that is; contracts that do not have a matching Euribor contract) will be settled to the midpoint of the CME Globex bid/ask during the (16:05:00 to 16:15:00 London time) settlement period, with adjustments made to incorporate relevant bid/ask activity in the spread between the serial (or front quarterly month if quarter tick eligible) and the first non-quarter tick eligible quarterly contract.

All Remaining Contract Months (RFD/RFI)

RSD and RSI not in their final settlement accrual period will settle to the following formula. The matching month ICE Euribor daily settlement + RSD/RSI settlement will equal the RFD/RFI settlement price. For example, if the Dec 2023 Euribor futures settle at 99.000 and the Dec 2023 RSD settles at .20 basis points the Dec 2023 RFD will settle at 99.200.

If you have any questions, please call the CME Global Command Center at 800.438.8616, in Europe at 44.800.898.013, or in Asia at 65.6532.5010.

Normal Daily Settlement Procedures for the RepoFunds Rate (Germany) – Three-Month Single Contract Basis Spread Futures Contract (RSD) and RepoFunds Rate (Italy) – Three-Month Single Contract Basis Spread Futures Contract (RSI)

CME Group staff determines the daily settlements for RSD/RSI based on trading activity on CME Globex between 16:05:00 and 16:15:00 London time, the settlement period.

Tier 1: Each contract month settles to its own volume-weighted average price (VWAP) of trades that occur between 16:05:00 and 16:15:00 London time, the settlement period, rounded to the nearest tradable tick.

Tier 2: If no trades occur on CME Globex during the settlement period, then the last trade is used to determine the settlement price validated against the CME Globex bid/ask.

Tier 3: In the absence of any trading activity, the daily settlement price will be determined by applying the net change from the preceding contract month to the given contract month's prior daily settlement price validated against the CME Globex bid/ask.

If you have any questions, please call the CME Global Command Center at 800.438.8616, in Europe at 44.800.898.013, or in Asia at 65.6532.5010.