

**SUBMISSION COVER SHEET**

**IMPORTANT:** Check box if Confidential Treatment is requested

Registered Entity Identifier Code (optional): 21-178

Organization: Chicago Mercantile Exchange Inc. ("CME")

Filing as a: DCM SEF DCO SDR

Please note - only ONE choice allowed.

Filing Date: 05/06/21 Filing Description: Initial listing of the Mexican Funding TIE (Monthly Contracts) Futures Contract

**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:**

May 6, 2021

**VIA ELECTRONIC PORTAL**

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

**Re: CFTC Regulation 40.2(a) Certification: Initial Listing of Mexican Funding TIIE  
(Monthly Contracts) Futures Contract.  
CME Submission No. 21-178**

Dear Mr. Kirkpatrick:

Chicago Mercantile Exchange Inc. (“CME” or “Exchange”) hereby certifies to the Commodity Futures Trading Commission (“CFTC”) the initial listing of the Mexican Funding TIIE (Monthly Contracts) Futures contract (the “Contract”) for trading on the CME Globex electronic trading platform (“CME Globex”) and for submission for clearing on CME ClearPort on Sunday, May 23, 2021, for first trade date Monday, May 24, 2021.

**Section 1 – Contract Specifications**

The Contract will have two (2) distinct features:

- (1) The final settlement price of an expiring contract shall be based upon the Mexican Overnight Funding TIIE (“F-TIIE”) interest rate benchmark.
- (2) The contract price basis will be the IMM Index, or “100 minus contract interest rate”, familiar to users of established short-term interest rate futures products such as the Exchange’s One-Month SOFR futures.

The price of a CME Mexican Funding TIIE (Monthly Contracts) Futures for a given delivery month is based on market expectations of compounded daily F-TIIE interest during the one-month interval that concludes at such contract’s final settlement. Exhibit 3 summarizes contract specifications.

***Price Basis and Unit of Trade***

Prices shall be quoted and made in terms of the IMM Index, *ie*, 100 minus the contract interest rate. For a contract for a given Delivery Month, the contract rate shall be compounded daily F-TIIE interest rate during the corresponding Reference Period, expressed as an interest rate per annum. For instance, a price of 95.94 Index points would signify a contract rate of 4.06 percent per annum

The contract shall be sized at 20,000 MXN times the corresponding IMM Index. Accordingly, each basis point per annum of the contract rate (*i.e.*, 0.01 Index points) shall be worth 200 MXN per contract.

***Termination of Trading, Final Settlement, and the Contract Reference Period***

Contract Months at initial listing will comprise the 25 months from June 2021 through July 2023, inclusive. Trading in any given expiring contract will terminate at 5:00pm Mexico City time on the last day of the contract Delivery Month, at which time the Bank of Mexico is regularly scheduled to publish the F-TIIE value for the last day of such expiring contract’s Reference Period.

**Exhibit 3 -- Contract Specifications**

<b>Trading Unit</b>	Compounded daily F-TIIE interest during Contract Reference Period, such that each basis point per annum of interest = 200 Mexican Pesos (MXN) per contract.  <b>Contract Reference Period:</b> For a given contract, interval from the first day of the month to and including the last day of the same month.
<b>Price Basis</b>	Contract-grade IMM Index: 100 minus R R = Compounded daily F-TIIE interest during Contract Reference Period. (See <b>Delivery</b> .) Example: Contract price of 95.94 IMM Index points signifies R = 4.06 percent per annum.
<b>Contract Size</b>	20,000 MXN x contract-grade IMM Index
<b>Minimum Price Increment</b>	0.01 IMM Index points (1 basis point per annum) equal to 200 MXN per contract
<b>Listing Schedule</b>	25 consecutive months Initial listed month: June 2021
<b>Termination of Trading</b>	Last Day of Trading: last business day of the month Termination of Trading: 5:00pm Mexico City time on Last Day of Trading.
<b>Delivery</b>	By cash settlement in MXN, by reference to Final Settlement Price, on last day of Delivery Month. <b>Final Settlement Price:</b> Contract-grade IMM Index (100 minus R) evaluated on the basis of realized F-TIIE values during Contract Reference Period: Final Settlement Price = 100 – R R $([\prod_i^D \{1 + (1/360) * (r_i / 100)\}] - 1) \times (360/D) \times 100$ I Running variable indexing calendar days during the monthly reference period $\prod_i$ Capital pi ( $\prod$ ) indicates the terms of the series should be compounded. It is the product running variable, $i = 1, 2, \dots, n$ . $r_i$ F-TIIE value for $i$ th day $d_i$ Number of calendar days to which $r_i$ applies D $\sum_i d_i$ (ie, number of calendar days in monthly reference period)
<b>Trading and Clearing Hours</b>	<b>CME Globex:</b> Sunday - Friday 5:00 p.m.-4:00 p.m. Central Time (CT) with a 60-minute break each day beginning at 4:00 p.m. CT  <b>CME Globex Pre-Open:</b> Sunday: 4:00 p.m.-5:00 p.m. CT Monday-Thursday: 4:45 p.m.- 5:00 p.m. CT  <b>CME ClearPort:</b> Sunday 5:00 p.m. - Friday 5:45 p.m. CT with a 15-minute break each day beginning at 5:45 p.m. CT
<b>Position Reporting and Accountability</b>	Reporting Level: 500 contracts Accountability Threshold: 1,000 contracts
<b>Block Trade Minimum</b>	10 contracts with 15-minute reporting window
<b>CME Globex Matching Algorithm</b>	A-Allocation
<b>Commodity Code</b>	TIE

Delivery on an expiring contract will be by cash settlement, through a final mark-to-market made by reference to the contract final settlement price. The final settlement price will be the contract IMM Index,

100 minus R, with R evaluated as the compounded daily F-TIIE interest rate per annum during the corresponding Contract Reference Period:

**Final Settlement Price = 100 – R**

<b>R</b>	$([\prod_i^D \{1+(1/360) \cdot (r_i/100)\}] - 1) \times (360/D) \times 100$
<b>i</b>	Running variable indexing calendar days during the monthly reference period
<b><math>\prod_i</math></b>	Capital pi ( $\prod$ ) indicates the terms of the series should be compounded. It is the product of values indexed by the running variable, $i=1,2,\dots,n$ .
<b><math>r_i</math></b>	F-TIIE value for ith day
<b><math>d_i</math></b>	Number of calendar days to which $r_i$ applies
<b>D</b>	$\sum d_i$ (ie, number of calendar days in monthly reference period)

**Termination of Trading, Final Settlement, and the Reference Month**

Contract Months initially listed for trading will be:

- June 2021, for which contract the Reference Period spans and the next 24 months to and including July 2023.

Trading in an expiring contract generally shall terminate at 5:00pm Mexico City time on the scheduled contract's Delivery Month.

**Section 2 – The Mexican Overnight TIIE Funding Rate**

The Bank of Mexico (the nation's central bank) recently created and now produces a new risk-free rate (RFR) abides by the recommendations of both the Financial Stability Board (FSB) and the Bank for International Settlements (BIS). This new rate is called TIIE de fondeo a un día or overnight TIIE funding rate (F-TIIE) and has established itself with other known Mexican interest rates such as the Tasa objetivo or Target rate and TIIE a 28 días or 28-day TIIE.

Like other FSB and BIS recommended RFRs, the F-TIIE is based on overnight repo trades conducted in the Mexican securities market. In its [January 16, 2020 press release](#), the Bank of Mexico announced that it will produce the F-TIIE rate daily and report the rate on its website <http://www.banxico.org.mx/> by 5:00 p.m. Mexico City time. In addition, given the deep pool of repo transaction and data storage, the Bank of Mexico has produced a time series of daily F-TIIE rates that go back to the start of 2006.<sup>1</sup>

The Mexican repurchase (repo) market is quite large with volume concentrated in short terms: 97% is for 1- to 3-day terms, while the remaining 3% is for terms shorter than one month. As for government securities that are mostly used in repo operations, bondes D account for 44.6% and BPAs for 26.5%. Banco de México publishes daily information on the repo market trading volume.<sup>2,3</sup> In percentage terms, the composition is presented in Exhibit 1.

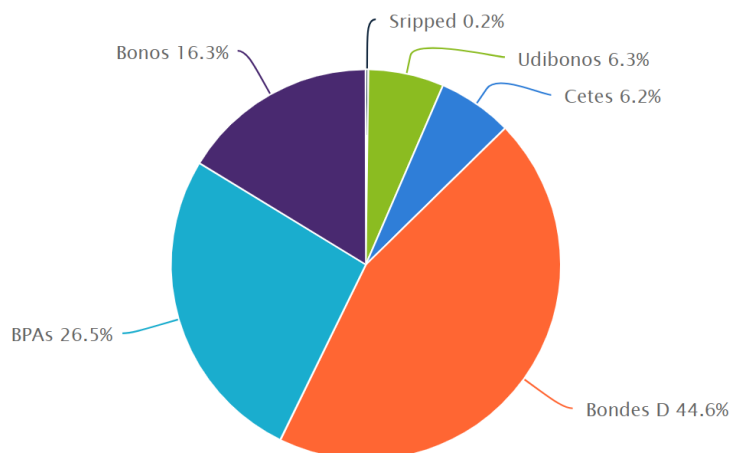
**Exhibit 1 --**

<sup>1</sup> Bank of Mexico, *Publication of the overnight TIIE funding rate and improvement of TIIE rates with longer than overnight maturities*, January 15, 2020 <https://www.banxico.org.mx/publications-and-press/other-announcements/%7BA3CFC638-5913-1C42-1843-360A95F89A92%7D.pdf>

<sup>2</sup> Bank of Mexico, *Economic Information System* <https://www.banxico.org.mx/tipcamb/main.do?page=tas&idioma=sp>

<sup>3</sup> Bank of Mexico, *The Mexican Government Securities Market, Types of Instruments and Their Placement*, 2014, Repurchase Agreements (repos) [https://www.banxico.org.mx/elib/mercado-valores-gub-en/OEBPS/Text/iven.html#\\_ftn18](https://www.banxico.org.mx/elib/mercado-valores-gub-en/OEBPS/Text/iven.html#_ftn18)

### Percentage breakdown of Mexican Repo Market Collateral Composition



The Overnight TIIE Funding Rate is calculated with wholesale overnight repurchase agreement (repo) transactions denominated in Mexican pesos, settled by banks and brokerage firms. These repo transactions are secured by debt instruments issued by the Federal Government, the Mexican Bank Savings Protection Institute (IPAB) and the Central Bank. The database considered by Banco de México consists of all the repo transactions with the characteristics described above, and that are settled through S.D. Indeval (Institución para el Depósito de Valores, S.A. de C.V. (INDEVAL)).<sup>4</sup>

There are specific governmental debt types underlying the Overnight TIIE Funding Rates listed below.<sup>5</sup>

- Certificados de la Tesorería de la Federación (CETES)
- Bono de Desarrollo de Desarrollo del Gobierno Federal con Tasa de Interés Fija (Bonos M)
- Bonos de Desarrollo del Gobierno Federal (Bondes D)
- Bonos de Desarrollo del Gobierno Federal denominados en Unidades de Inversión (UDIBONOS).
- Instruments issued by IPAB are Bonos de Protección al Ahorro and the securities issued by the Central Bank are Bonos de Regulación Monetaria (BREMS).

The F-TIIE rate is one of three current short-end interest rates in Mexico including 28-Day TIIE and the Government funding rate. Exhibit 2 shows close correlation of the rates. Also notice that the Government funding rate is nearly identical to the F-TIIE rate today and [rates](#) are updated daily<sup>6</sup> The 28-Day TIIE rate is the Mexican rate akin to LIBOR for the Mexican market. It is defined as the Interbank Equilibrium Interest

<sup>4</sup> See Bank of Mexico, *Determining the Overnight TIIE Funding Rate*, March 2021

<https://www.banxico.org.mx/markets/d/%7B1FDD2772-9F1C-FDA3-FBBC-AC641FE94CD2%7D.pdf>

<sup>5</sup> For a comprehensive listing of types of securities in Mexico see, *The Mexican Government Securities Market, Types of Instruments and Their Placement*, 2014, Ma. Rebeca Acosta-Arellano and Claudia Álvarez-Toca <https://www.banxico.org.mx/elib/mercado-valores-gub-en/OEBPS/Text/default.html>

<sup>6</sup>Bank of Mexico, Interbank Interest Rates, Funding Rate and Banking Promissory Notes - (CF113), Jan 1968-Feb 2021,

<https://www.banxico.org.mx/SielInternet/consultarDirectorioInternetAction.do?sector=18&accion=consultarCuadro&idCuadro=CF113&locale=en>

Rate using commercial bank quotes. Like LIBOR there are no specific underlying transactions.<sup>7</sup> The Government Funding rate “is the representative rate of wholesale funding operations carried out by banks and brokerage houses on repurchase operations within a bank business day with debt securities issued by TESOE.”<sup>8</sup>

**Exhibit 2 --  
Daily F-TIIE, 28-Day TIIE and Government Funding Rate January 2006, to Feb, 2021**

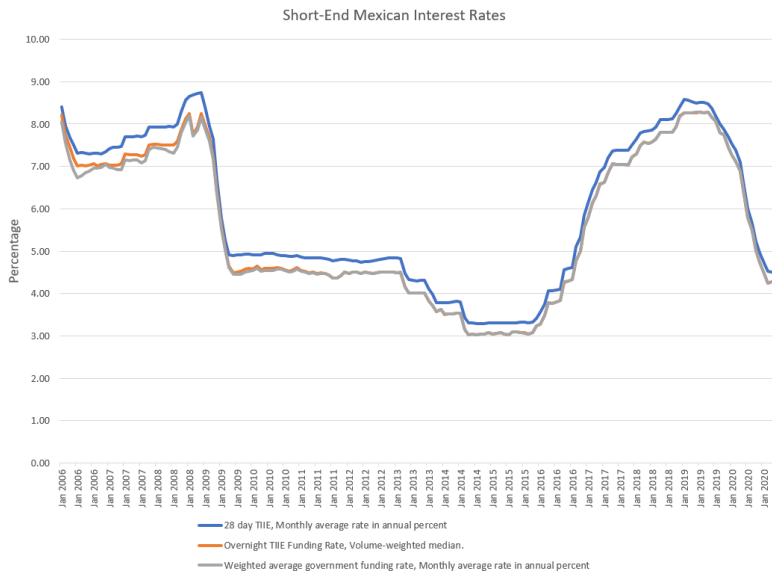
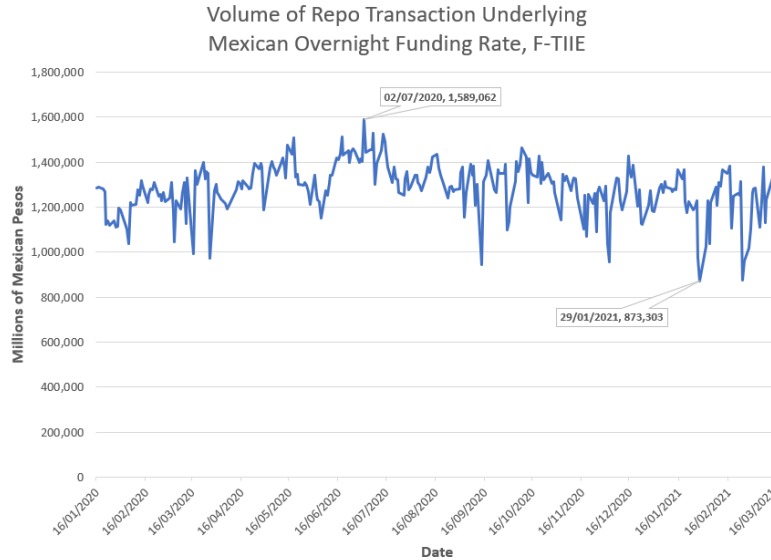


Exhibit 3 displays daily F-TIIE volumes of eligible transaction volumes during most of 2020 and up to the latest available information. The average volumes during this time were 1,285,000 million Mexican Pesos (\$61 billion USD at an exchange rate of 21 USDMXN). Noted on the chart are the maximum and minimum values of 1,589,000 million Mexican Pesos and 873,000 million Mexican Pesos. In addition, in late Q1 early Q2 2021 most markets witnessed tremendous volatility and illiquidity during as the COVID-19 pandemic took hold around the world. F-TIIE eligible repo volumes were well within the normal range of operations during this highly volatile period of time.

**Exhibit 3 --  
Daily F-TIIE and Eligible Transaction Volumes, January 16, 2020, to March 19, 2021**

<sup>7</sup> Bank of Mexico, Economic Information System, Representative Interest Rates  
<https://www.banxico.org.mx/SielInternet/consultarDirectorioInternetAction.do?accion=consultarCuadroAnalitico&idCuadro=CA51&locale=en>  
<sup>8</sup> Bank of Mexico, Government Funding Rate – (CF349)  
<https://www.banxico.org.mx/SielInternet/consultarDirectorioInternetAction.do?accion=consultarCuadro&idCuadro=CF349&locale=en>



Source: Banco de Mexico

The Overnight TIIE Funding Rate is determined as a volume-weighted median of interest rates paid on Mexican peso denominated repo transactions mentioned in the previous paragraph. For the calculation of the Overnight TIIE Funding Rate, the INDEVAL database is filtered to remove transactions settled among institutions belonging to the same financial group. The remaining transactions determine the base sample used in the rate calculation.

The volume-weighted median is calculated by ordering the transactions of the base sample from the lowest to the highest rate, thus, the first transaction is the one with the lowest interest rate of the base sample and the last operation is, the one with the highest interest rate. If there are two or more transactions with the same interest rate, the transaction with the lowest amount is sorted first. Then, for each transaction of the ordered base sample, the cumulative volume is calculated and expressed as a percentage of the total volume of said base sample.

The Overnight TIIE Funding Rate is then determined as the interest rate associated with the first transaction which cumulative volume represents 50% or more. At publication, the volume-weighted median is expressed in annual terms and rounded to two decimal places.”<sup>9</sup>

According to the operation manual issued by the depository institution in Mexico (INDEVAL), the trades that are to be cleared on a same day basis must be registered and sent between 8:00 a.m. and 4:15 p.m. Mexico City time. However, these trades may have taken place as early as approximately 7:00 a.m. Mexico City time. The detailed calculation procedure of the daily Overnight TIIE Funding Rate is as follows:

1. Define  $n$  as the total of wholesale overnight repo transactions in Mexican pesos settled by banks and brokerage houses included in the base sample the day of the computation of the rate. The amount of each transaction included in the base sample is expressed in pesos and it is defined as  $y_i$ . The rate corresponding to each transaction is defined as  $r_i$ . For both cases, the subscript  $i$  represents the  $i$ th transaction, for  $i = 1, \dots, n$ .
2. The transactions in the base sample are sorted by rate in ascending order from the lowest to highest rate so that  $\{r(1), \dots, r(n)\}$ , where:

<sup>9</sup> See Bank of Mexico, *Determining the Overnight TIIE Funding Rate*, March 2021 <https://www.banxico.org.mx/markets/d/%7B1FDD2772-9F1C-FDA3-FBBC-AC641FE94CD2%7D.pdf>

$$r(1) \leq r(2) \leq \dots \leq r(n).$$

In case two or more transactions from the base sample have the same rate, the transaction with the lowest amount is sorted first.

3. The total aggregated volume (VTA) is calculated as the sum of the amount, expressed in Mexican pesos, of every transaction included in the base sample:

$$VTA = \sum y(i)$$

4. For each transaction in the base sample, and sorted according to the criterion stated in numeral 2, a cumulative volume is computed adding the volume of all the transactions from the first to the  $i$ th transaction. The cumulative volume for the  $i$ th transaction is defined as  $V_i$ , and it is expressed as the percentage of the total aggregated volume defined in numeral 3, according to the following formula:

$$V_i = \frac{\sum_{j=1}^i y(j)}{VTA} * 100,$$

where  $y(j)$  represents the associated amount of the  $j$ th operation, for  $j = 1, \dots, i$ .

5. The Overnight TIE Funding Rate is determined as the rate associated to the first transaction that has a cumulative volume larger or equal than 50% ( $V_i \geq 50$ ), according to the ascending sorting defined in numeral 2. Finally, the rate is expressed in annual terms and rounded to two decimal places.

In addition to stable and large volumes there the market is comprised of a deep and broad pool of liquidity. Exhibit 2 shows composition of trades and volumes by the top 10 counterparties in the market.



**Exhibit 3 --  
Daily F-TIE Top Market Participants Percentage Number of Trades and Volumes January 2021**

January		
Market participant	% of total volume	% of total trades
1	18.5%	11.6%
2	11.2%	7.3%
3	10.5%	8.2%
4	10.3%	8.1%
5	6.3%	8.0%
6	6.0%	5.3%
7	4.2%	3.5%
8	3.1%	4.0%
9	2.4%	2.2%
10	2.4%	1.8%
11	2.2%	4.3%
12	2.1%	0.8%
13	1.9%	2.9%
14	1.8%	3.0%
15	1.7%	1.5%
16	1.7%	3.4%
17	1.6%	1.4%
18	1.5%	3.4%
19	0.9%	1.6%
20	0.9%	0.7%

**January**

The total number of trades per day range between 1,600 and 2,900 operations (rounded numbers). The top 5 institutions traded 43% of the total trades, while these trades amounted to 56.8% of the total volume. The top 10 institutions traded 60.1% of the total trades and 75% of the total volume, while the top 20 institutions, represented 83.2% and 91.2% of the prior elements, respectively. These repo trades are executed between banks and/or brokerage houses. Still, these trades can be executed on their behalf or for a third party. Overall, the Bank of Mexico identify 54 market participants.

**Exhibit 4 --  
Daily F-TIE Top Market Participants Percentage Number of Trades and Volumes February 2021**

February		
Market participant	% of total volume	% of total trades
1	16.0%	10.4%
2	12.1%	7.8%
3	10.5%	8.2%
4	8.9%	7.6%
5	7.0%	8.1%
6	6.2%	5.3%
7	4.5%	3.5%
8	3.4%	4.7%
9	2.8%	1.0%
10	2.5%	3.7%
11	2.5%	2.1%
12	2.3%	1.8%
13	2.1%	3.3%
14	1.8%	1.4%
15	1.7%	3.4%
16	1.6%	2.4%
17	1.6%	3.7%
18	1.5%	1.6%
19	1.0%	0.8%
20	0.9%	1.5%

**February**

Total number of trades per day range between 1,700 and 2,800 operations. The top 5 institutions traded 42.1% of the total trades, while these trades amounted to 54.6% of the total volume. The top 10 institutions traded 60.3% of the total trades and 73.9% of the total volume, while the top 20 institutions, represented 82.4% and 90.7% of the prior elements, respectively. Overall, the Bank of Mexico identify 52 market participants.

**Exhibit 5 --  
Daily F-TIE Top Market Participants Percentage Number of Trades and Volumes partial March 2021**

**March**

Market participant	% of total trades	% of total volume
1	10.3%	15.5%
2	7.4%	11.5%
3	7.3%	8.9%
4	6.6%	8.1%
5	6.5%	7.9%
6	6.1%	6.7%
7	5.2%	6.1%
8	4.2%	4.0%
9	3.6%	3.2%
10	3.6%	2.5%

**March**

The supplemental information in Exhibit 3 as provided by the Bank of Mexico delivers additional insights that other RFR disclosures may not have. This exhibit shows a deep and diverse market. The total number of trades per day range between 2,000 and 2,500 operations. Information available for March 2021 show that the top 5 institutions traded 38% of the total trades, while these trades amounted to 51.9% of the total volume. The top 10 institutions traded 60% of the total trades and 74% of the total volume, while the top 20 institutions, represented 85% and 91% of the prior elements, respectively. In March 2021, there were 53 total participants reported.

In addition to the above, below is a comprehensive list of daily activity that includes:

1. Number of transactions each day
2. number of participants
3. breakdown of types of participants - In all cases the type of participants are banks (both commercial or development banks) and brokerage firms

*Exhibit 6 --Daily F-TIE Top Market Participants Percentage Number of Trades and Volumes partial March 2021*

Date	Volume	Number of participants	Number of trades
12/01/2020	\$1,291,684,204,035.71	50	2719
12/02/2020	\$1,037,055,426,804.64	51	1990
12/03/2020	\$958,757,915,660.97	47	1899
12/04/2020	\$1,174,471,383,661.31	48	2346
12/07/2020	\$1,308,073,242,591.36	48	2532
12/08/2020	\$1,331,312,980,767.45	47	2541
12/09/2020	\$1,324,714,953,323.22	48	2514
12/10/2020	\$1,230,025,931,765.89	50	2365
12/11/2020	\$1,187,347,688,169.62	46	2431
12/14/2020	\$1,268,759,528,102.59	44	2276
12/15/2020	\$1,426,864,777,089.08	46	2628
12/16/2020	\$1,367,893,233,034.63	48	2652
12/17/2020	\$1,334,071,463,776.92	49	2587
12/18/2020	\$1,386,567,787,423.28	50	2716
12/21/2020	\$1,204,998,871,556.61	49	2396
12/22/2020	\$1,276,205,672,626.40	47	2714
12/23/2020	\$1,128,034,694,203.15	47	2525
12/24/2020	\$1,122,514,746,479.35	48	2423
12/28/2020	\$1,206,727,977,333.32	48	2669
12/29/2020	\$1,273,393,422,802.10	51	2687
12/30/2020	\$1,183,926,986,734.48	47	2543
12/31/2020	\$1,178,069,292,078.29	48	2468
01/04/2021	\$1,285,060,235,453.82	47	2664
01/05/2021	\$1,302,917,924,516.89	49	2864
01/06/2021	\$1,264,309,485,969.78	49	2818
01/07/2021	\$1,313,147,223,681.72	47	2691
01/08/2021	\$1,287,684,979,110.47	49	2728
01/11/2021	\$1,280,511,085,327.30	47	2519
01/12/2021	\$1,269,515,349,473.45	47	2602
01/13/2021	\$1,280,403,161,027.26	47	2559
01/14/2021	\$1,276,642,923,487.49	47	2558
01/15/2021	\$1,364,059,293,532.35	48	2747
01/18/2021	\$1,326,255,030,670.00	49	2678
01/19/2021	\$1,365,530,887,945.64	47	2899
01/20/2021	\$1,223,506,935,087.56	50	2679
01/21/2021	\$1,177,068,197,615.89	46	2566
01/22/2021	\$1,224,992,573,540.84	46	2614
01/25/2021	\$1,188,960,465,141.02	45	2496
01/26/2021	\$1,198,379,926,059.02	50	2583
01/27/2021	\$1,229,815,718,704.41	46	2589
01/28/2021	\$976,132,394,147.75	48	2050
01/29/2021	\$873,302,761,688.93	42	1575
02/02/2021	\$1,026,630,376,012.50	45	2166
02/03/2021	\$1,226,619,077,868.87	45	2460
02/04/2021	\$1,037,630,521,937.78	44	2004
02/05/2021	\$1,220,910,435,887.07	46	2517
02/08/2021	\$1,289,763,848,786.97	48	2828
02/09/2021	\$1,208,374,529,842.68	46	2448
02/10/2021	\$1,310,219,696,565.25	49	2682
02/11/2021	\$1,293,313,814,194.79	47	2647
02/12/2021	\$1,364,182,999,696.03	46	2642
02/15/2021	\$1,351,458,906,545.44	50	2670
02/16/2021	\$1,354,185,053,644.65	49	2660
02/17/2021	\$1,383,725,947,979.82	47	2614
02/18/2021	\$1,105,852,966,438.63	47	2047
02/19/2021	\$1,248,128,113,481.41	47	2523
02/22/2021	\$1,260,907,204,832.11	45	2542
02/23/2021	\$1,254,075,330,432.49	48	2567
02/24/2021	\$1,314,443,168,584.96	49	2572
02/25/2021	\$875,159,701,633.44	44	1662
02/26/2021	\$962,295,652,700.04	44	1837
03/01/2021	\$1,016,988,131,619.47	44	1915
03/02/2021	\$1,102,743,966,668.89	46	2100
03/03/2021	\$1,262,929,695,679.31	49	2694
03/04/2021	\$1,281,501,586,719.43	48	2754
03/05/2021	\$1,284,208,587,592.34	46	2636
03/08/2021	\$1,109,308,959,427.07	44	2229
03/09/2021	\$1,222,759,308,330.62	44	2210
03/10/2021	\$1,379,081,193,093.93	50	2565
03/11/2021	\$1,129,766,139,174.57	45	2062
03/12/2021	\$1,234,325,443,783.56	47	2376

The Exchange has met with several market participants. These include individual client meetings with Santander, BBVA, Barclays, Goldman Sachs, Monex, HSBC, Citi/Banamex, Banorte, ITAU, Finamex, Millennium. These firms have been supportive of CME Groups effort to launch futures on F-TIIE.

Finally, the Bank of Mexico has a well thought out process if there is ever a disruption in the index. According to the regulation that oversees the determination of the O/N TIIE Funding rate and other reference rates and prices (Circular 3/2012 – Articles 163 BIS 3 and 163 BIS 4), in the case that the Bank of Mexico isn't able to obtain the actual transactions considered for the determination of the O/N TIIE Funding rate, the central bank has two alternatives to do so:

1. As a first option, it will obtain all the repo data from trades executed through brokers and that are approved by the National Banking and Securities Commission (Comisión Nacional Bancaria y de Valores) ("CNBV"). From that data, it will create the general sample and will determine the O/N TIIE Funding rate with the same procedure as the one used on a daily basis, and
2. In the case that the Bank of Mexico is not able to obtain the aforementioned information, the Central Bank will request different banks and brokerage houses to participate in the determination of the O/N TIIE Funding rate. Hence, these market participants will be asked to provide quotes, for a specific amount that the Central Bank considers appropriate given market trading conditions and considerations, for an O/N repo. These quotes will be firm quotes and the Central Bank may act in consequence if the latter are considered inappropriate to market conditions. After obtaining all the relevant quotes, the Central Bank will follow the regular procedure to determine said interest rate.

### Section 3 -- Compliance with Core Principles

The Exchange has reviewed the designated contract market Core Principles ("Core Principles") as set forth in the Act and has identified that listing the Contract may impact the following Core Principles:

#### **Core Principle 2 – Compliance with Rules**

The Contract 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 1, the F-TIIE benchmark is supported by a substantial and reliably active transaction pool. Moreover, the statistical measure employed to produce the benchmark value on any given day – the transaction-volume-weighted median rate is reasonably robust. Final settlement prices for the contract shall be based on multiple daily values of the F-TIIE benchmark, spanning one month.

In view of these considerations, both the F-TIIE benchmark itself and its application in connection with the contracts possess sufficient integrity to deflect attempted cornering, manipulation, crowding, or exertion of undue influence upon final settlement of expiring contracts.

#### **Core Principle 4 – Prevention of Market Disruption**

The Contract 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**

Mexican Funding TIIE (Monthly Contracts) Futures shall be subject to a Position Reporting Level of 500 contracts, a Single-Month Position Accountability Level of 1,000 net futures contract equivalents, and an All-Month Position Accountability Level of 1,000 net futures contract equivalents.

To appreciate the proportions of the Position Accountability standards, assume that the representative level of traffic in the market for applicable Mexican overnight unsecured funding transaction, which supports the F-TIIE benchmark, is around \$60 billion USD equivalent per day. Relative to this transaction flow, the hypothetical holdings reflected in the Position Accountability Levels for Mexican Funding TIIE (Monthly Contracts) Futures signify less than 2 percent. In Mexican Peso the amounts as calculated as.

In order to calculate a hypothetical notional amount one can use the sensitivity or first derivative of the change in price with a change in 1 basis point (bp) or 1/100 of a percentage point. This is stated as

$$200 \text{ MXN/bp}$$

We then divide this sensitivity by a basis point in whole number terms.

$$\frac{200 \text{ MXN/bp}}{0.0001} = 200,000 \text{ MXN}$$

We then need to scale this result by the number of months to get a rough sense of the size of the contract. Again, this is hypothetical and there are some variations for day count and discount factors.

$$200,000 \text{ MXN} \times 12 = 2,400,000 \text{ MXN}$$

We then use this figure as a basis to determine the size of the contract relative to the market.

$$\frac{(1,000 \text{ futures} \times \text{approximately } 2,400,000 \text{ MXN} / \text{future})}{\text{average daily volumes } 1,285,000,000,000 \text{ MXN}} = 1.87\%$$

### **Core Principle 7 – Availability of General Information**

The Exchange shall disseminate a Special Executive Report (“SER”) that sets forth information regarding the specifications, terms, and conditions of the contracts. The SER will also be available on the CME Group 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 Contract will be listed for trading on the CME Globex electronic trading and for submission for clearing through CME ClearPort. The CME Globex electronic trading venue provides for competitive and open execution of transactions. CME Globex affords the benefits of reliability and global connectivity.

### **Core Principle 10 – Trade Information**

All requisite trade information shall 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 Contract shall be cleared by CME Clearing, which is registered with the Commission as a derivatives clearing organization, 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 contracts.

***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 shall 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 contracts are identified.

***Core Principle 14 – Dispute Resolution***

Disputes in respect of the contracts shall be 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.

The Exchange certifies that listing the Contract complies 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](mailto:CMEGSubmissionInquiry@cmegroup.com).

Sincerely,

/s/ Christopher Bowen  
Managing Director and Chief Regulatory Counsel

Attachments: Appendix A CME Rulebook Chapter 475  
Appendix B Position Limit, Position Accountability, and Reportable Level Table,  
CME Rulebook Chapter 5 (attached under separate cover)  
Appendix C CME Rule 588.H. – (“Globex Non-Reviewable Trading Ranges”) Table  
Appendix D Special Price Fluctuation Limits and Daily Price Limits Table,  
CME Rulebook Chapter 5  
Appendix E Exchange Fees



**Appendix A**  
**CME Rulebook**  
**Chapter 475**  
**Mexican Funding TIIE (Monthly Contracts) Futures**

**47500. SCOPE OF CHAPTER**

This chapter is limited in application to Mexican Funding TIIE (Monthly Contracts) Futures (“futures” or “contract”). In addition to this chapter, futures shall be subject to the general rules and regulations of the Exchange insofar as applicable.

Unless otherwise specified, times referenced herein shall indicate Chicago time.

**47501. CONTRACT SPECIFICATIONS**

Each contract is valued at 20,000 times the contract-grade IMM Index (Rule 47002.C.).

**47502. TRADING SPECIFICATIONS**

**47502.A. Trading Schedule**

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

**47502.B. Trading Unit**

For a contract for a given delivery month, the unit of trading shall be compounded daily Overnight Funding TIIE Rate (F-TIIE) interest during the contract Reference Month (Rule 47503.A.1.), expressed as an interest rate per annum for which (i) such interest rate shall accrue on the basis of the actual number of days spanned by such contract Reference Month, divided by a 360-day year, and (ii) each basis point per annum of such interest rate shall be worth 200 Mexican Pesos per futures contract. The F-TIIE shall be published by the Banco de Mexico.

**47502.C. Price Basis and Minimum Price Increments**

For a contract for a given delivery month, prices shall be quoted and made in terms of the contract IMM Index (“Index”), 100.0000 minus compounded daily F-TIIE interest rate during the contract Reference Month, as specified in Rule 47502.B.

*Example:* Where the value of such compounded daily F-TIIE is 4.06 percent per annum, it shall be quoted as an Index value of 95.94.

The minimum price fluctuation shall be 0.01 Index points, equal to 200 Mexican Pesos per contract.

**47502.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.

**47502.E. 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.

**47502.F. [Reserved]**

**47502.G. Termination of Trading**

Trading in an expiring contract shall terminate at 5:00 p.m. Mexico City time on the last Mexican Business day of the month.

**47502.H. [Reserved]**

**47503. SETTLEMENT PROCEDURES**

Delivery shall be by cash settlement in Mexican Pesos.

**47503.A. Final Settlement Price**

**1. Definition of Reference Month**

For a contract for a given delivery month, the Reference Month shall be the interval that begins on the first day of each month and ends on the last day of the same month.

*Example:* For a hypothetical contract for which the delivery month is June 2021, the Contract Reference Period shall start on Tuesday, June 1, 2021. The Contract Reference Period shall end on Wednesday June 30, 2021.

**2. Definition of Final Settlement Price**

For a contract for a given delivery month, the Final Settlement Price shall be 100 minus compounded daily F-TIIE rate during the contract Reference Period ("R"), as follows:

$$\text{Final Settlement Price} = 100 - R$$

R	$([\prod_i^P \{1 + (1/360) * (r_i / 100)\}] - 1) \times (360/D) \times 100$
i	Running variable indexing calendar days during the monthly reference period
$\prod_i$	Capital pi ( $\prod$ ) indicates the terms of the series should be compounded. It is the product of values indexed by the running variable, $i = 1, 2, \dots, n$ .
$r_i$	F-TIIE value for ith day
$d_i$	Number of calendar days to which $r_i$ applies
D	$\sum_i d_i$ (ie, number of calendar days in monthly reference period)

**3. Computational Conventions**

The final settlement price for an expiring contract shall be calculated and published by the Exchange on the day on which the Bank of Mexico publishes the F-TIIE value for the last day of such contract's Reference Period at 5:00 p.m. Mexico City time (Rule 47503.A.1.).

The F-TIIE value for the last day of such expiring contract's Reference Month shall be as first published by the Bank of Mexico.

The value of *R* determined pursuant to Rule 47503.A.2. shall be rounded to the nearest 1/10,000<sup>th</sup> of one percent per annum, *ie*, the nearest 1/100<sup>th</sup> of one interest rate basis point per annum, or 0.0001 Index points. A tie value, *ie*, any such value ending in ending in 0.00005, shall be rounded up.

*Example:* A value of 4.14155 percent per annum would be rounded up to 4.1416 percent per annum, and then subtracted from 100.000 to determine a contract final settlement price of 95.8584 Index points.

**47503.B. Final Settlement**

Clearing members holding open positions in a contract at the time of termination of trading in such 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.

**47504.-35. [RESERVED]**

**DISCLAIMER**

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of Mexico does not guarantee, and expressly disclaims any liability for, and makes no representations or warranties, whether express or implied, as to the currency, accuracy, timeliness, completeness or fitness for any particular purpose of the F-TIIE benchmark. The Bank of Mexico accepts no liability whatsoever for any loss (including, but not limited to any direct, indirect or consequential loss, whether or not such loss is foreseeable and whether or not the Bank of Mexico has been apprised of the use to which the F-TIIE benchmark will be put) howsoever arising from the use, the timeliness of delivery or the failure of delivery of the F-TIIE benchmark.

(End Chapter 475)

**Appendix B**

**CME Rulebook**

**Chapter 5**

**(“Trading Qualifications and Practices”)**

**Position Limit, Position Accountability, and Reportable Level Table**

(attached under separate cover)

## Appendix C

### CME Rulebook Chapter 5 ("Trading Qualifications and Practices")

#### Rule 588.H. ("Globex Non-Reviewable Trading Ranges") Table

Instrument	Globex Symbol	Outrights			Spreads	
		Globex Non-Reviewable Ranges (NRR)	NRR: Globex Format	NRR: Minimum Ticks	NRR: Globex Format	NRR: Minimum Ticks

Mexican Funding TIE (Monthly Contracts) Futures

TIE

40 basis points

40

40

Each leg evaluated as an outright

## Appendix D

### CME Rulebook Chapter 5 ("Trading Qualifications and Practices")

#### Rule 589. Special Price Fluctuation Limits and Daily Price Limits Table

Product	RULEBOOK CHAPTER	COMMODITY CODE	PRIMARY/ ASSOCIATED	ASSOCIATED WITH	Regular Trading Hours (RTH) (7:00-17:00 Central Time)					Extended Trading Hours (ETH) (17:00-7:00 Central Time)						
					BASE IN REAL ECONOMIC VALUE	Level 1	Level 2	Level 3	Level 4	Level 5	BASE IN REAL ECONOMIC VALUE	Level 1	Level 2	Level 3	Level 4	Level 5
<a href="#">Mexican Funding TIE (Monthly Contracts) Futures</a>	475	TIE	Primary	Primary	<u>MXN 20,000</u>	<u>100</u>	<u>200</u>	<u>300</u>	<u>400</u>	<u>No limit</u>	<u>MXN 20,000</u>	<u>100</u>	<u>200</u>	<u>300</u>	<u>400</u>	<u>No limit</u>

## Appendix E Exchange Fees

Fees are charged per side (both buy and sell side) per contract.	Venue/Transaction Type	Interest Rate	
		Futures	
		Front Months	Back Months
Individual Members Clearing Equity Member Firms Rule 106.J Equity Member Firms & Rule 106.J Qualified Subsidiaries Rule 106.I Member Firms & Rule 106.I Qualified Affiliates Rule 106.S Member Approved Funds	Delivery	\$0.09	
	CME Globex	\$0.19	\$0.14
	EFP EFR Block*	\$0.29	\$0.24
Rule 106.D Lessees Rule 106.F Employees	Delivery	\$0.30	
	CME Globex	\$0.37	\$0.32
	EFP EFR Block*	\$0.50	\$0.45
Rule 106.R Electronic Corporate Member (For other than CME Globex EFP EFR Block - See Non-Members)	CME Globex	\$0.49	\$0.44
	EFP EFR Block*	\$0.90	\$0.85
Rule 106.H and 106.N Firms Clearing Non-Equity Member Firms	Delivery	\$0.49	
	CME Globex	\$0.49	\$0.44
	EFP EFR Block*	\$0.69	\$0.64
International Incentive Program (IIP) Participants International Volume Incentive Program (IVIP) Participants	Delivery	\$0.50	
	CME Globex	\$0.50	
	EFP EFR Block*	\$1.35	\$1.05
Central Bank Incentive Program (CBIP) Participants Latin American Fund Manager Incentive Program (FMIP) Participants	Delivery	\$0.70	
	CME Globex	\$0.75	
	EFP EFR Block*	\$1.35	\$1.05
Members Trading Outside of Division (For other than CME Globex During ETH - See Non-Members)	CME Globex - During ETH Only	\$0.80	\$0.75
Non-Members (Including: CTA/Hedge Fund Incentive Program Participants, Emerging Markets Bank Incentive Program (EMBIP) Participants & CBOE Members)	Delivery	\$0.70	
	CME Globex	\$1.25	\$0.95
	CME Globex – Bundles	\$0.80	
	EFP EFR Block*	\$1.35	\$1.05

\* Exchange fees for Block transactions will be reduced and equivalent to CME Globex transaction fees through May 31, 2022.

Processing Fees	Fee
106.D Lessee/106.H Brokerage	\$0.13
106.F Employee Brokerage	\$0.13
Floor / "New" Brokerage	\$0.04
Position Adjustment/Position Transfer	\$0.10
Give-Up Surcharge	\$0.05 †
Facilitation Fee	\$0.00

† Give-up Surcharge processing fee will be waived through May 31, 2022,