

CME Conversion for Cleared MXN 28D TIE Swaps

Conversion Methodology and Examples

March 2024

Subject to Discussion and Regulatory Review

The contents of this document are for informational purposes only and provide an overview of CME's approach to the MXN Tasa de Interés Interbancaria de Equilibrio (TIIE) transition for CME cleared swaps. The plan is subject to change at any time without prior notice. Any implementation of the points discussed is subject to regulatory review and to any necessary internal and external approvals.

Background: Bank of Mexico 28D TIIE Prohibitions and Modification

In December 2022, pursuant to various recommendations issued by the Financial Stability Board and the International Organization of Securities Commissions, the Bank of Mexico issued a [press release](#) announcing that:

- The use of 28D TIIE for new agreements would be prohibited from January 1, 2025, onwards
- Following January 1, 2025, financial institutions will only be allowed to use the TIIE de Fondeo (Funding TIIE / F-TIIE) as a benchmark rate
- The Bank of Mexico will modify the methodology for calculating TIIE greater than 1 banking day and continue publication so that current agreements using such reference rates may not require amendments

Furthermore, in December 2023, based on feedback from the industry, the Bank of Mexico announced a waiver period to help facilitate the market's transition to F-TIIE, whereby:

- Starting January 2025, new 28D TIIE swaps that mature prior to 2026 will be exempt from the prohibitions
- The modified methodology for calculating the 28D TIIE rate will still go into effect from January 1, 2025, as originally communicated

Conversion Process Considerations

CME has successfully partnered with market participants to transition EUR, GBP, JPY, CHF and USD denominated IBOR cleared swaps by converting to market-standard risk-free rate swaps, including a cash adjustment in the process to compensate for any associated changes in valuation.

Based on feedback received through multiple consultation periods, CME intends to leverage similar principles to convert 28D TIIE interest rate swaps to F-TIIE overnight index swaps (OIS) in advance of the Bank of Mexico's trading prohibitions that are scheduled to go into effect on January 1, 2025.

This conversion of 28D TIIE swaps will benefit the marketplace by:

- Adhering to the modification and corresponding timeline of 28D TIIE trading prohibitions set forth by the Bank of Mexico
- Facilitating a shift in liquidity towards Mexico's risk free rate, F-TIIE, for cleared interest rate swaps
- Providing participants certainty that "legacy" cleared and "new" contracts will be fungible with one another upon transitioning liquidity to F-TIIE

Conversion Process Considerations

In December 2023, the Bank of Mexico issued a waiver that permits an additional one-year period for trading 28D TIIE contracts that expire by the end of 2025. This implies that any swaps with fixings including and after December 3, 2025, will not be covered by the waiver due to the T+1 market convention for 28D TIIE fixings. To account for this, CME will define the Index Waiver Expiration Date (IWED) as December 3, 2025:

Index Waiver Expiration Date (IWED) = December 3, 2025

Fixings prior to December 3, 2025 = pre-IWED

Fixings from December 3, 2025 onward = post-IWED

The CME conversion process will:

- ✓ Maintain 28D TIIE fixings that occur between the November 22, 2024 Primary Conversion date and the IWED
- ✓ Allow for all in scope 28D TIIE swaps to be converted on a single conversion date and maintain all pre-IWED 28D TIIE payments

Basis Swaps and FRAs:

- ✓ CME does not support MXN FRAs or basis swaps for clearing

Product Scope and Conversion Timing

Scope: All CME cleared MXN 28D TIIE swaps that contain fixings on and after the IWED of December 3, 2025

Target Primary Conversion Timing: Friday, November 22, 2024

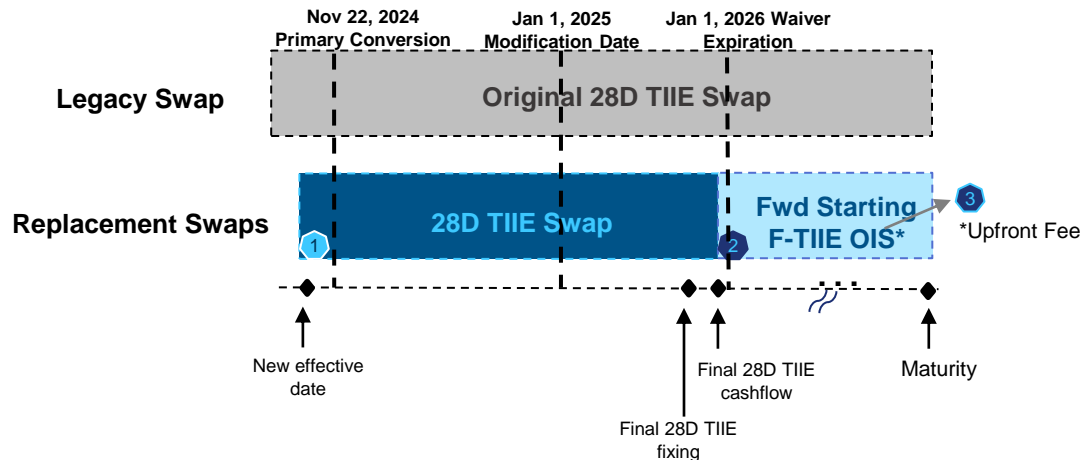
Conversion Process: CME plans to convert all in scope MXN 28D TIIE swaps into corresponding replacement swap(s), whereby:

- ✓ Each 28D TIIE swap is converted into **28D TIIE and/or F-TIIE replacement swaps;**

Resulting replacement swap(s) will differ slightly by economic terms. Operationally, the process will be a close-out (termination) of the original swap and establishment of new replacement contracts. However, the legal characterization of this conversion event will be as an amendment of the original contract.

- ✓ Key economics are copied over to both the 28D TIIE and F-TIIE replacement swaps;
- ✓ The Bank of Mexico spread adjustment of 24 bps will be applied to the floating leg of the F-TIIE replacement swap;
- ✓ Cash compensation is applied as an upfront fee to the F-TIIE replacement swap;
- ✓ CME will maintain pre-IWED 28D TIIE coupons through the conversion process, restating these accrual periods in the 28D TIIE replacement swap

Conversion Approach and Replacement Swap Structure



CME will utilize the following conversion methodology, whereby legacy cleared 28D TIIE swaps with post-IWED fixings will be terminated and replaced with the following:

- 1) A 28D TIIE replacement swap that is designed to capture any pre-IWED 28D TIIE fixings
- 2) A forward starting F-TIIE replacement overnight index swap (OIS) that will maintain the legacy swap's fixed rate, replace the 28D floating rate with daily compounding F-TIIE plus the Bank of Mexico spread adjustment of 24 bps, and will apply a 2D payment offset to both the fixed and floating legs. This swap will become effective once the 28D TIIE replacement swap expires, and its maturity will match the original legacy swap
- 3) Cash compensation in the form of an upfront fee will be included on the forward starting F-TIIE replacement OIS to account for any NPV differences between the legacy 28D TIIE swap (valued under the Bank of Mexico modification methodology) and the corresponding replacement swaps (related to the changes outlined above) booked by CME at the point of conversion

Cash Compensation Calculation and Considerations

Cash Compensation = Adj NPV of Legacy 28D TIIE Swap – Adj NPV of all Replacement Swaps*

Pricing legacy 28D TIIE swaps on conversion date:

- *Considerations:* Ensure pricing of the 28D TIIE swaps is fair and is not subject to manipulation
- *Plan:* CME's conversion pricing approach will be based on the Bank of Mexico Modification Methodology (see [Annex 11](#) or [CME material](#) for additional details)

Convert 28D TIIE swaps to corresponding 28D TIIE and F-TIIE replacement swaps:

- *Considerations:* Reduce the differences in cash flow amounts for the projected cash flows
Ensure the converted swaps maintain the pre-IWED 28D TIIE coupons that are unpaid
- *Plan:* Account for the Bank of Mexico spread adjustment on the F-TIIE swap to ensure minimal difference in future cash flows
Based on the swap effective date, book a 28D TIIE replacement swap to account for all pre-IWED fixings

Pricing replacement 28D TIIE and F-TIIE swaps on relevant conversion date:

- Price the replacement swaps on relevant conversion date consistent with CME's conversion pricing approach

**Adjusted NPV = NPV of Swap – Present Value of any fees or coupons due to settle the following business day*

Market Standard Day Count and Holiday Conventions

The below methodology changes will be implemented to book replacement F-TIIE OIS that reference standard economic attributes. Using standard trade attributes ensures that the replacement F-TIIE swaps are supported by execution venues and back-office systems:

- **Fixed/Float Leg Day Counts**
 - 28D TIIE replacement swap: preserved from the original swap
 - F-TIIE replacement swap: **defaulted to the market standard convention of ACT/360**
- **Additional Payment Calendars:** All MXN swaps are required to have the Mexico (MXMC) calendar for payments and fixings. Additional calendars are defined as any other calendars listed on the original TIIE swap
 - 28D TIIE replacement swap: preserved from the original swap
 - F-TIIE replacement swap: **defaulted to the market standard convention of Mexico (MXMC). No additional calendars are carried over**

Additional Conversion Considerations

For 28D TIIE swaps with pre-IWED effective dates:

- A 28D TIIE replacement swap will be booked to capture any pre-IWED 28D TIIE fixings. Due to the adjusted cash flow dates, the effective date on replacement swaps may not match the original swap cash flow in some cases ([see examples](#))
- A forward starting F-TIIE OIS replacement with the 24 bps Bank of Mexico spread adjustment will also be booked to capture post-IWED fixings. Cash compensation will be included in the form of an upfront fee on this F-TIIE OIS replacement.

For forward starting 28D TIIE swaps with post-IWED effective dates:

- The conversion methodology for **forward starting swaps will remain unchanged** from the previous conversion events, where:
 - A F-TIIE replacement swap will maintain the effective date, maturity date and fixed leg economic terms (excluding payment offset)
 - A single compensation fee is included and paid the following Mexico business day
 - A 2D payment offset is added to both legs of the F-TIIE replacement swap, consistent with market standard OIS conventions

Post-Primary Conversion Considerations

Support of 28D TIIE swap clearing between the Primary Conversion event and the IWED (November 25, 2024 - December 3, 2025):

- Newly cleared 28D TIIE swaps that contain only pre-IWED fixings will remain unchanged, complying with the Bank of Mexico waiver period
- New 28D TIIE swaps that contain post-IWED fixings **will be converted as a part of daily conversion cycles**

Daily Conversion Process:

- Following the November 22, 2024 primary conversion event, F-TIIE is expected to become the primary liquidity pool for MXN denominated interest rate swaps, and new trading activity in 28D TIIE will be limited, especially for trades extending beyond the end of 2025
- Immediately following the primary conversion event, CME will begin running daily conversion processes to convert newly cleared 28D TIIE swaps with post-IWED fixings
- Any newly cleared 28D TIIE swap that does not contain post-IWED fixings will not be subject to daily conversions
- Beginning January 2025, clearing support for 28D TIIE swaps with post-IWED fixings will be limited to swaps that are a result of a bilateral swaption expiry and will be subject to daily conversion processes on acceptance as noted above

Daily Conversion Process

Following the November 22, 2024 primary conversion event, CME will begin running daily conversion cycles through the end of 2025 to convert any new 28D TIIE swaps that participants send in for clearing with post-IWED fixings.

Daily conversions will utilize the same logic applied for the primary conversion event and may result in:

- A single F-TIIE replacement swap (instances where the original 28D TIIE swap's effective date is on or after the IWED), **or**
- Both a 28D TIIE and F-TIIE replacement swap (instances where the original 28D TIIE swap's effective date is pre-IWED)

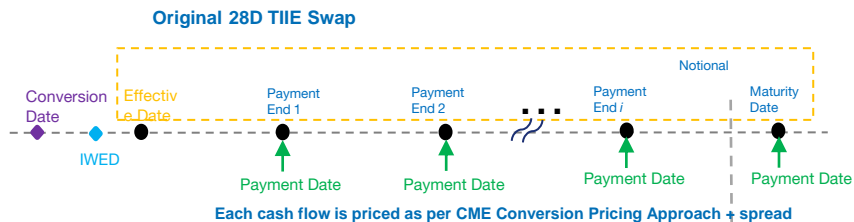
Operational considerations for daily conversions:

- As a part of CME's end of day processing, in scope 28D TIIE swaps will be converted to the respective 28D TIIE and/or F-TIIE OIS following the close-of-business on the cleared date
- Additional information regarding the operational processing of this conversion event can be found on the [TIIE Transition webpage](#)

Example A: 28D TIIE swap with Effective Date that is post-IWED

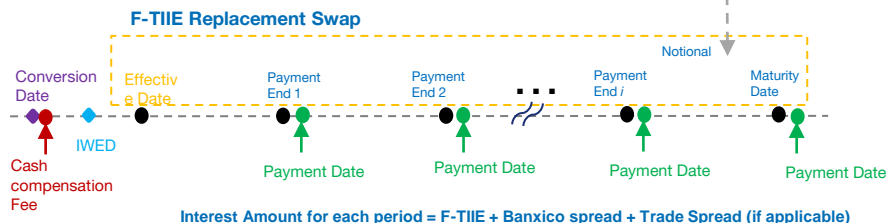
Converts to a single F-TIIE OIS replacement

Pricing and Termination of TIIE Swap



Preserved on converted trade

Converted Trade Attributes



Conversion Methodology

- ✓ Price the 28D TIIE swap using CME's conversion pricing approach
- ✓ Effective date, maturity date, notional, payment frequency, and direction are preserved from 28D TIIE swap
- ✓ Override the Payment Offset to standard F-TIIE convention on both fixed and floating legs
- ✓ Override the below attributes to market standard F-TIIE OIS conventions on floating leg:
 - Index Name and Tenor
 - Fixing Offset, fixing calendar, and adjustments
 - Bank of Mexico modification spread of 24 bps plus the original trade spread are added to compounded F-TIIE leg
- ✓ Upfront fee (cash compensation) is added to F-TIIE replacement swap and will settle on the next good business day

Example A: 28D TIIE Swap with Effective Date that is post-IWED

Forward starting 28D TIIE IRS converts to F-TIIE OIS

Conversion Date = November 22, 2024

Original 28D TIIE IRS	
Currency	MXN
Notional	100,000,000
Trade Date	08/18/2024
Effective Date	12/05/2025
Maturity Date	12/01/2028
Fixed Direction	Payer
Fixed Rate	8.775%
Fixed Leg Payment Freq.	28D
Fixed Leg Payment Offset	n/a
Floating Rate Index	MXN-TIIE
Float Leg Index Tenor	28D
Float Leg Payment Freq.	28D
Float Leg Pay Adj Calendar	MXMC
Float Leg Payment Offset	0D
Float Leg Compounding Method	None
Reset Relative To	Begin Period
Float Leg Fixing Adj Calendar	MXMC
Date Roll	NONE
Status	Terminated



F-TIIE OIS Replacement	
Currency	MXN
Notional	100,000,000
Trade Date*	11/22/2024
Effective Date	12/05/2025
Maturity Date	12/01/2028
Fixed Direction	Payer
Fixed Rate	8.775%
Fixed Leg Payment Freq.	28D
Fixed Leg Payment Offset	2D
Floating Rate Index	MXN-TIIE ON-OIS Compound
Float Leg Index Tenor	1D
Float Leg Payment Freq.	28D
Float Leg Pay Adj Calendar	MXMC
Float Leg Payment Offset	2D
Float Leg Compounding Method	ISDA OIS Compounding
Reset Relative To	End of Period
Float Leg Fixing Adj Calendar	MXMC
Date Roll	NONE
Status	Cleared
Upfront Fee	Cash compensation fee
Upfront Fee Payment Date	11/25/2024
Float Leg Spread	Fixed spread adjustment (0.24%)

- ☐ = Economic preserved
☒ = Economic changed/added

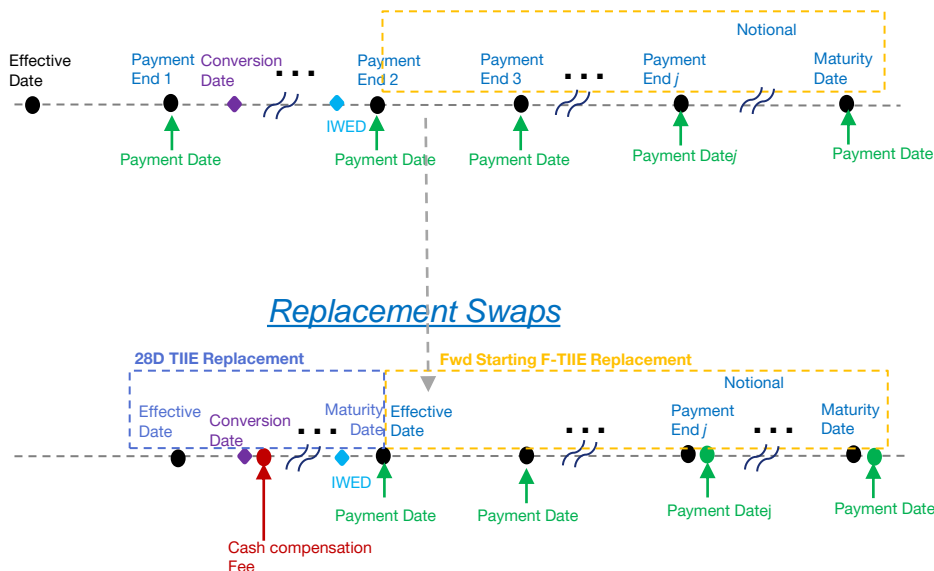
*Trade Date field on all replacement swaps will reflect the date of conversion

Example B: 28D TIIE swap with Effective Date that is pre-IWED and pre-Conversion

Converts to combination of 28D TIIE and forward starting F-TIIE OIS replacements

Pricing and Termination of 28D TIIE Swap

Pricing and other calculation same as previous example



IWED: Index Waiver Effective Date = December 03, 2025

Conversion Methodology

- ✓ Book a forward starting F-TIIE swap with Effective date set as the next payment period start date immediately following IWED. Note, the payment accruals are preserved. F-TIIE by default compounds every 1D
- ✓ Notional for the F-TIIE swap is the same as original 28D TIIE swap
- ✓ Change floating spread to Bank of Mexico modification formula spread of 24 bps + trade spread (if applicable)
- ✓ Any pre-IWED 28D TIIE or fixed coupon payments are settled as a 28D TIIE replacement swap. All subsequent periods are added to the F-TIIE replacement swap:
 - The 28D TIIE replacement swap will accrue all pre-IWED 28D TIIE fixings inclusive of any trade spread using the compounding convention on the original swap
 - Bank of Mexico modification spread will NOT be added to the 28D TIIE replacement swap

Example B: 28D TIIE swap with Effective Date that is pre-Conversion and pre-IWED

28D TIIE IRS converts to 28D TIIE IRS and F-TIIE OIS

Conversion Date = November 22, 2024

Original 28D TIIE IRS	
Currency	MXN
Notional	200,000,000
Trade Date	06/18/2024
Effective Date	06/19/2024
Maturity Date	06/13/2029
Fixed Direction	Payer
Fixed Rate	8.775%
Fixed Leg Payment Freq.	28D
Fixed Leg Payment Offset	n/a
Floating Rate Index	MXN-TIIE
Float Leg Index Tenor	28D
Float Leg Payment Freq.	28D
Float Leg Pay Adj Calendar	MXMC
Float Leg Payment Offset	0D
Float Leg Compounding Method	None
Reset Relative To	Begin Period
Float Leg Fixing Adj Calendar	MXMC
Date Roll	NONE
Status	Terminated



28D TIIE IRS – Replacement 1	
Product Type	IRS
Notional	200,000,000
Effective Date	11/06/2024
Maturity Date	12/31/2025
Float/Fixed Leg Payment Freq	28D
Upfront Fee	None
Float/Fixed Leg	Majority of other economics preserved

F-TIIE OIS – Replacement 2	
Currency	MXN
Notional	200,000,000
Trade Date*	11/22/2024
Effective Date	12/31/2025
Maturity Date	6/13/2029
Fixed Direction	Payer
Fixed Rate	8.775%
Fixed Leg Payment Freq.	28D
Fixed Leg Payment Offset	2D
Floating Rate Index	MXN-TIIE ON-OIS Compound
Float Leg Index Tenor	1D
Float Leg Payment Offset	2D
Float Leg Payment Freq	28D
Reset Relative To	End Period
Date Roll	None
Float Leg Fixing Adj Calendar	MXMC
Status	Cleared
Upfront Fee	Cash compensation
Upfront Fee Payment Date	11/25/2024
Float Leg Spread	Fixed spread adjustment (0.24%)

- ☐ = Economic preserved
☒ = Economic changed/added

*Trade Date field on all replacement swaps will reflect the date of conversion

Example C: 28D TIIE swap with Effective Date that is post-Conversion and pre-IWED

28D TIIE IRS converts to 28D TIIE IRS and F-TIIE OIS

Conversion Date = November 22, 2024

Original 28D TIIE IRS	
Currency	MXN
Notional	200,000,000
Trade Date	03/07/2024
Effective Date	03/27/2025
Maturity Date	03/26/2026
Fixed Direction	Payer
Fixed Rate	9.435%
Fixed Leg Payment Freq.	28D
Fixed Leg Payment Offset	n/a
Floating Rate Index	MXN-TIIE
Float Leg Index Tenor	28D
Float Leg Payment Freq.	28D
Float Leg Pay Adj Calendar	MXMC
Float Leg Payment Offset	0D
Float Leg Compounding Method	None
Reset Relative To	Begin Period
Float Leg Fixing Adj Calendar	MXMC
Date Roll	NONE
Status	Terminated



28D TIIE IRS – Replacement 1	
Product Type	IRS
Notional	200,000,000
Effective Date	03/27/2025
Maturity Date	12/04/2025
Float/Fixed Leg Payment Freq	28D
Upfront Fee	None
Float/Fixed Leg	Majority of other economics preserved
F-TIIE OIS – Replacement 2	
Currency	MXN
Notional	200,000,000
Trade Date*	11/22/2024
Effective Date	12/04/2025
Maturity Date	03/26/2026
Fixed Direction	Payer
Fixed Rate	9.435%
Fixed Leg Payment Freq.	28D
Fixed Leg Payment Offset	2D
Floating Rate Index	MXN-TIIE ON-OIS Compound
Float Leg Index Tenor	1D
Float Leg Payment Offset	2D
Float Leg Payment Freq	28D
Reset Relative To	End Period
Date Roll	None
Float Leg Fixing Adj Calendar	MXMC
Status	Cleared
Upfront Fee	Cash compensation
Upfront Fee Payment Date	11/25/2024
Float Leg Spread	Fixed spread adjustment (0.24%)

- ☐ = Economic preserved
☐ = Economic changed/added

*Trade Date field on replacement swaps will reflect the date of conversion

CCP Conversion Fees

Subject to regulatory review, CME will charge the following per line-item fees on F-TIIE replacement swaps resulting from the conversion:

Account Type	Conversion Fee (USD)
House	\$10
Customer*	\$50

**Applies to both standard and alternate fee schedule customers*

- For bilateral swaption exercises that result in a cleared swap under the legacy 28D TIIE index, a conversion fee corresponding to the appropriate account type per converted trade will be applied to the position in addition to the new trade clearing fees
- Conversion fees do not apply to the Short dated 28D TIIE replacement swaps or the terminated 28D TIIE swaps

Contact Information and Additional Resources

- Please contact ClearedSwapConversion@CMEGroup.com if you would like to raise any questions, provide feedback, and/or discuss the cleared MXN 28D TIIE swap conversion in further detail.
- Additional conversion material and resources can be found on CME Group's [TIIE Transition webpage](#).

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The contents of this document are for informational purposes only and provide CME's proposed approach at the time of publication indicated on the title page. The proposal is subject to change at any time without prior notice. Any implementation of the points discussed is subject to regulatory review and to any necessary internal and external approvals and to implementation by CME. The final terms of the MXN 28D TIIE transition will be set out in the CME Rulebook. Market participants affected by the MXN 28D TIIE transition should obtain appropriate legal, accounting and taxation advice and should not rely on this document.

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